

# MANUFACTURERS' RECORD.

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## Manufacturers' Record.

RICHARD H. EDMONDS, President.  
THOMAS P. GRASTY, Vice-President  
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BALTIMORE, JUNE 20, 1901.

### COPY FOR ADVERTISEMENTS.

Advertising copy (changes or new advertisements) should reach us Saturday Morning to insure insertion in the issue of the following week. For the first issue in the month we should receive copy by Friday Morning of the week preceding.

## The Texas Oil Reports for the Manufacturers' Record.

DR. HENRY FROEHLING,  
Analytical and Consulting Chemist.

Richmond, Va., June 11, 1901.

Editor Manufacturers' Record,  
Baltimore, Md.:

I have read Mr. C. F. Z. Caracristi's letters to the Manufacturers' Record, as well as his reports to the Bureau of American Republics, with great interest and profit, and am greatly pleased to learn that he has consented to investigate and report on the oil fields in the South for the Manufacturers' Record.

Such an investigation, to be of benefit to your readers, must be made by a man of large experience, thorough education and broad intellect. In Caracristi you have this happy combination. His knowledge of oils and coal is the most thorough I have ever encountered, and his extensive practice gives his judgment an especial value.

I know of no one more thoroughly familiar with the subjects of oil and coal than Mr. Caracristi, and await his report with great interest. Very truly yours,

HENRY FROEHLING.

### Cedartown an Example.

In a statement prepared by Mr. Charles Adamson of Cedartown, Ga., are given facts showing the interest and the faith of Northern capital in a Southern community and the beneficial effects upon both interests. He said that in 1895 there was not a cotton mill in Cedartown, which is the county-seat of Polk county. The Cedartown Company, organized by Philadelphians, which has operated there for ten years, has directly or indirectly brought the town to its present flourishing condition, with three high-grade hosiery-yarn mills and two large knitting mills making high-grade underwear. During the last twelve months there were built in the town two cotton mills, representing \$250,000; a \$10,000 cottonseed-oil mill, a \$2000 ice factory, a \$1000 foundry, a \$3000 planing mill, 156 dwellings representing \$62,550, two churches costing \$2000, a \$3500 business block and a \$3000 cotton warehouse. There are in course of erection four stores at a cost of \$18,000,

an \$8000 city hall, a \$10,000 box factory and a \$50,000 extension of a cotton mill. Two railroads cross the town from north to south and one from east to west. Cedartown ships iron ore to furnaces of Alabama, Georgia and Tennessee. A few facts of this kind, showing what Philadelphia capital has accomplished in the South, are worth more than thousands of general statements about what ought to be done.

### The Fizzle at Philadelphia.

The alleged Southern Industrial Convention, after five months of exploitation, has met in Philadelphia, and has adjourned. It came down fully to the expectations of the Manufacturers' Record. Philadelphia has our sincere sympathy. With three of its newspapers led into a misconception of the purposes of the convention, the city may hardly be expected to be guilty of the breach of courtesy of commenting upon the disappointment to the spirit of magnificent hospitality which it is ready to display so lavishly whenever the occasion justifies. Nor may one look for adverse criticism from any of the Southern gentlemen who, similarly mistaken, but in sincere desire to leave nothing undone in behalf of their section, gave their support to the undertaking in its earlier form, or who did their best at Philadelphia, for the credit of their section, to retrieve an unfortunate situation. As certain of our Southern newspaper friends maintained their hopefulness at a distance even to the assembling of the convention, it remains for the Manufacturers' Record, a friend of Philadelphia anxious to extend business relations with the South, and the friend of the busy, prospering South, ready to greet Philadelphia or any other progressive city, to indulge in a bit of plain talk, in the hope that both Philadelphia and the South, rapidly forgetting the lamentable incident of the past week, may help to make a repetition of it anywhere an impossibility.

The earlier moves were marked by glittering generalities, which were printed here and there where the experiences of the convention at Chattanooga and New Orleans were not comprehended. These gave way to definite statement, indefinitely phrased at times, as soon as "official" headquarters had been established at Philadelphia. About the first of them was the following:

Something over 1000 delegates have thus far been appointed by the governors of the Southern States, while commercial bodies are now naming their delegations in unusually large numbers. The indications are, therefore, extremely favorable for a very large and successful convention. A number of United States senators and members of Congress are coming to Philadelphia to attend the meetings. . . . The governors of almost every Southern State, the senators and the larger majority of the members of Congress from that section will come to Philadelphia to represent their respective constituencies. . . . The most prominent men of the South will participate in the discussions, and many of national and international reputation.

That was a spur to the efforts of the Philadelphians, who had been induced to enter the enterprise, to raise several thousand dollars for the entertainment of the expected visitors from the South. With it went the other statements like these:

More than 1000 business men and capitalists of the New South will be here early in June next as delegates to the Southern Industrial Convention, and with them will come a throng of visitors, most of whom will receive in Philadelphia on this occasion their first impressions of Northern enterprise and hospitality. . . . These delegates and guests will represent and embody the vitalizing spirit of progress in Southern industry and commerce. . . . Delegates and representatives from more than three score chambers of commerce and boards of trade in the South will depict clearly the commercial and industrial situation in their respective communities.

The newspapers of the South have taken up the project, and from Texas to Virginia the press is giving the matter extremely liberal attention.

From the secretary's announcement it is gleaned that there will be no less than one thousand of the most prominent business men and capitalists of the South in Philadelphia during the convention as delegates, and accompanying these will be hundreds of men and women. . . . The speakers selected will consist of the foremost authorities on this continent on the topics assigned to them for debate. . . . From Texas to Maryland the boards of trade and chambers of commerce are naming their representatives, and in some instances as many as sixty have been named from one of the larger cities. An interesting feature will be the sessions of the women's organizations of the South, these having recently taken active part in the commercial advancement and industrial progress of that section.

From the governors of the Southern States came word yesterday that they will be in Philadelphia next week at the Southern Industrial Convention with very nearly a complete representation. . . . The commercial organizations of Southern cities are sending in their lists of delegates in larger numbers than was anticipated.

Appointments of delegates from the States and cities of the South were received in large number yesterday, and many new speakers were added to the list.

The city of Pensacola, Fla., will send a special car with forty delegates independent of the State delegation, which will include many of the most prominent men in the Commonwealth.

The Texans have informed the local committee that they will come to Philadelphia on special trains.

These were the outgivings during the month of May principally. On June 8, three days before the opening of the convention, came the following:

Numerous additional announcements reached Secretary Thompson yesterday that the delegations coming would be considerably larger than at first contemplated, and from points where at the outset but four or five representatives were expected the number will be more than doubled. . . . There are enrolled representatives from over 200 cities and towns of the South, and from the way new delegations are coming in at present, the secretary estimates that at least 300 Southern towns will be on the list when the convention is called to order on Tuesday morning. He estimates that at the lowest there will be over 1000 Southern men of affairs in attendance at the sessions, as every commercial body of the South, with but few

exceptions, will be represented at the convention.

These statements, taken from the columns of the Philadelphia paper which seemed to be the organ of the convention, were not the dreams of that paper. They must have had an origin. Certainly the outcome did not fulfill them. The elaborate report of the convention's proceedings by the same paper records the fact that at the conclusion of the first session less than 150 delegates had registered, no matter how many hundred were "on the list;" that there were among them one Southern governor, one Southern congressman and one Southern mayor of the expected host, and that among the great centers of industry and commerce reporting by delegates were Waxahachie, Texas; Beeville, Texas, and Millboro, Va., while New Haven, Ky., was named as the maker of some of the best whiskey in the world.

It is no wonder that four days before the meeting "it was found necessary to make some material changes in the programs of the daily sessions, owing to the inability of some of the speakers scheduled at the outset to attend the convention," or that the unblushing garrulity of two or three individuals, representing nothing but themselves, and very little at that, was put to the front in consequence of changes in the program made during the sessions. Even the officers of the convention failed to startle the world by their originality, the words of the secretary eliciting the comment from the Wilmington (N. C.) Messenger, "Of course, all this is old to Southern readers of newspapers," and the New York Sun announcing that the president's address "recited no facts not known to those who have studied the subject, but it was impressive."

The president, by the way, remarked one day upon the scantiness of the attendance of Philadelphians upon the convention. In explanation a Philadelphian told the convention the next day that every word at the convention was being recorded at the expense of the Philadelphia committee, and that while Philadelphians were interested in the convention, they were largely very busy men. As most of the facts brought out have been recorded and printed for quite a while, the expense of the local committee would appear at this distance as unnecessary. But as busy men they will be able to understand why so few of the men who are representative of the industry and trade of the South are to be found at midsummer industrial conventions, and, in fact, at any conventions, save those standing for a definite, permanent aim. They are very busy men, too.

A word or two in conclusion. When, months ago, the Manufacturers' Record refused to support the scheme for the convention, it was charged at Philadelphia that the inspiration of its opposition was the failure of Baltimore to secure the convention. That suggestion was on a par with many of



the statements quoted above, and, of course, was given no weight by the Manufacturers' Record. As a matter of fact, if the proposition had ever been made that the Southern Industrial Association Convention should come to Baltimore, the Manufacturers' Record, ever ready to support any undertaking likely to benefit the South, would have done all within its power to prevent Baltimore from accepting the invitation to entertain it. It is unnecessary to tell Philadelphia why, though Philadelphia has nothing to be ashamed of in connection with the fizzle.

### Virginia's Chance.

Several years ago J. Hoge Tyler offered in the senate of Virginia a bill providing for the exemption from taxation for ten years of all foreign capital invested in new mining and manufacturing industries in the Commonwealth. The bill was defeated, on the ground that it was unconstitutional. The assembling of a constitutional convention has brought the project again to the front, and Mr. Tyler, now governor of Virginia, made a recommendation of it the burden of an address before that body. He spoke of the rich mineral and agricultural resources of the State, its many water-powers and its favorable position for commerce and trade, and on the subject of limited exemption said:

There are some who would argue against this policy; they say it is not just to the industries and mines that we have to give new enterprises such an advantage over the old. But the Commonwealth of Virginia has a right to offer inducements, to have created in her borders new taxable values, and it is a shortsighted policy that would stand in the path of such progress and development. There is no industry in this State that would not be benefited by having many more like it near, and certainly when we consider that when, in so short a time as ten years in the life of a State, all the others would be helping to bear the burden of taxation, we could see how rapid would be the growth and how much lighter the burden when thus distributed. Let us make a bid for fifty shipyards like the ones at Newport News and Richmond and create scenes along the banks of our rivers like the one I once beheld on the Clyde at Glasgow, where I counted over 300 large vessels being built along the banks of that river. Why cannot we have works of this kind on the James and on the Appomattox? Why cannot we develop the magnificent water-powers that flow from the summits of the Alleghany and the Blue Ridge mountains down to the sea?

Why cannot the lands that once were in profitable cultivation, but that are now growing up in brush and broom-sage, be made to bloom again? Would it not be wise to offer inducements to foreign capital to come and cultivate them? We could say to the homeseeker from every section, come and dwell with us, we will exempt from taxation the capital that you bring for a sufficient number of years to give you a start, and buy stock and erect buildings on these waste places. Every barren acre is a blot on the State, and should be erased. I ask that this convention, framing a new constitution, will permit the State and local authorities to offer such inducements as I have indicated for capital to come within our borders.

The constitutional convention originated largely in a consideration of what are generally regarded as basic political principles or of problems growing from their application. While these will naturally engage much of the attention of the convention, and while that body is discussing and settling them, it is hoped, to the honor and welfare of Virginia, it should not lose the opportunity, suggested in the address of the governor, to complete the revision of its constitution by making it possible for the State to advance rapidly in population and wealth in enjoyment of it. A fundamental principle of the politics, not of party, but

of economics, becoming more and more recognized, is that however richly endowed by nature a State may be, it cannot have adequate development if its legislation is unfavorable to the forces of development. It cannot hope to compete successfully with States having fewer natural resources, but offering liberal inducements for the investment of capital. As Governor Tyler points out, existing industries may seem to be threatened with injustice temporarily by legislation giving new undertakings a limited advantage in taxation. But it is contended, on the other hand, that such a policy would tend to the benefit of the whole State, in which all must ultimately share, as the reputation for progressiveness thereby given to the State would mean much more materially than the amount of money actually invested there during the period of tax limitation.

However opinions may differ as to the wisdom of such a policy, it is worthy the attention of Virginia assembled in convention. Open debate of it even would indicate the mind of Virginia on the subject of liberality to capital, and hence might be of great good, though the governor's suggestion be not embodied in the fundamental law.

### Southern Labor Conditions.

In recent years attempts have been made to induce Southern legislatures to imitate other lawmaking bodies in interference between labor and capital, particularly as they are related to each other in the cotton-mill industry. Among the latest manifestations of the kind was a tour of an English woman through the South and her effort to contribute indirectly to the contents of the statute-books of Alabama. On her return to New York she is reported as making an address concluding with the statement: "There are men living here who are known in the North as philanthropists, who earn their incomes through the employment of babies in their Southern investments." Her speech was of such a character that the New York Mail and Express, in commenting upon it, offered the suggestion that while it is likely that the question of child labor in the factories of the South should be looked into, and that restrictions ought to be made, "reports of inquiries, in order to be useful, should present definite facts, and not sweeping general statements of a 'sensational' kind."

The Mail and Express probably knows that it is beyond the power of outside agitators against Southern labor conditions to present definite facts of value, and that even if such a feat were possible, it would hardly be attempted, inasmuch as facts appeal to the mind, while general statements of a sensational kind as appealing to the midriff are the principal vehicles of agitatory thought. At the same time it may be well to state again that the question is being looked into by the persons best qualified to study it and to settle it to the best interests of all individuals having the right to be concerned in it, with whom it is scarcely necessary to say, traveling English women or travelers of any kind can by no stretch of the imagination be included. The men engaged in the investigation of mill conditions are fully cognizant of the difficulties surrounding them. They know the people with whom they have to deal, of the same American stock as themselves, of notable adaptability, and, fortunately, free from many of the vagaries which, with

the coming of a flood of aliens in other sections, have been permitted to influence legislation to the detriment of employe and employer. These men, too, have sense enough to know that no regulation of labor may be made suitable to all circumstances, and they have indicated their purpose to interfere as slightly as possible in the natural evolution of the solution of the problem, except in so far as they may with justice to all concerned and with reason hasten it. Equally determined are they to resist outside interference on the part of ignorance, self-seeking or astute hostility, and in that they will be, in all probability, sustained by the common sense of the country, which is beginning to realize through experience the danger of such an intrusion not only to the South, but, because of the South, to the nation. One experiment of the kind in a century is enough.

Whatever shadow of truth there may be in the English woman's assertion about philanthropists of the North—and the North may settle that as it pleases—the South knows in sympathy that the North is cursed with a set of persons who make their life easy by the sweat of their followers' brows in posing as philanthropists for labor, and that these fellows must soon go to work for a living unless they succeed in misleading Southern labor to sacrifice itself in buttressing their decaying fortunes.

### The Gulf Ports.

It is significant that among recent advance sheets of consular reports issued by the State Department was comment upon plans of three different countries for steamship connection with the Gulf ports. Consul Thackara at Havre reported the beginning on May 15 of an all-year service of freight steamships between Galveston, Havre and Rotterdam. Seven steamships will be engaged in the service, which will be monthly until the middle of September, when it will be increased by as many additional sailings as the trade may require. Vice-Consul Murphy of Frankfurt reported plans for the establishment of a regular steamship connection between Antwerp, Havre, Havana, Vera Cruz, Tampico, Progreso and New Orleans, and Consul Fleming of Edinburgh, announcing the opening of the new Imperial Dock at Leith, wrote that a line of steamers consisting of four vessels of from 8000 to 10,000 tons burden will be established by the North Atlantic Steamship Co., Ltd., to ply between Leith, New Orleans and Galveston, their special object being to carry grain and cotton. These vessels are to run only from September 1 to March 31. These are straws upon the current of international trade. They indicate the importance from a European standpoint already attained by the Gulf ports, and point to their further greatness when they shall be convenient to the great highway of trade from the East to the West.

Mr. Henry G. Kittredge has resigned the industrial editorship of the New York Commercial, to take effect on July 1. This announcement will be received with regret. Of the daily papers of the country, the New York Commercial has been a leader in the promptness, completeness and comprehensiveness of its industrial news. It has been particularly thorough in its handling of Southern news of the kind. The standing it has attained in that

particular must be attributed to the intelligent and broadminded policy of Mr. Kittredge, whose place will be hard to fill.

### Wants an Ice Factory.

Brooksville, Fla., June 12.

Editor Manufacturers' Record:

It may interest you and your readers to know that there is a good opening here for a small ice factory. There is considerable ice shipped into town, notwithstanding it retails at one cent a pound, whereas if a factory was here selling it at reasonable rates the consumption would be more than quadrupled. Another and possibly more important item of interest to an ice man is the fact that railroad facilities will be extended this year to Hudson, on the Gulf, where there are good fishing grounds, and from whence fish will be shipped the year round. This railroad is built to open up the naval stores and lumber industries, which employ together several thousand hands, free consumers of ice. There is no question but that there is a very good opening here for such a plant.

OTTO C. BUTTERWECK.

### FOR FREEDOM OF ACTION.

Judge Emory Speer's Address at the University of Georgia.

The University of Georgia is celebrating its centennial this week. An important feature of the exercises was the address on Tuesday by Judge Emory Speer of the United States Court, who had been selected as the orator by the alumni society of the university. He discussed the marvelous native resources of the country, particularly of the South, the supremacy of the nation in industrial arts, the necessity for foreign markets, particularly in China, and for the isthmian canal. He expressed admiration at the diplomacy and statesmanship of America in the Chinese imbroglio, and in connection with the startling growth of Russian power and its evident purpose to dominate the East commercially he urged the importance of American and English control in the Pacific and the strengthening of friendly relations which exist between the great branches of the Anglo-Saxon race. A striking portion of Judge Speer's address was that in which he urged Southern men to think and vote for themselves, and not in a blind or partisan way, upon the great national and international issues of the time. On this point he referred to the national position held by Southern leaders a half-century ago, and said:

"Is this true now? In our abnormal and unhealthy political methods have not the chicanery and cunning of the slate-maker and wire-puller, intended to control the small politicians who dawdle about courthouse towns, supplanted appeals to the masses which made every heart glow with pride in the consciousness of that high responsibility devolved by political freedom? Have not the arts of machine politicians been substituted for eloquence like that which 'shook the arsenal and fulminated over Greece from Macedon to Artaxerxes' throne? The theory of our Constitution is that every American citizen is sovereign. How long shall these sovereigns quiver under the party lash? Shall we forever support a measure because it is said to be to the party's interest, or shall we inquire, in the words of Henry Clay, 'Is the measure right, will it conduce to the general happiness, to the elevation of national character?' Shall we forever vote without regard to the character or capacity of a candidate because he has secured a party nomination, or shall we again recur



## NEGRO COLONIZATION PLANNED BY LINCOLN.

By Edward Ingle.

[Written for the Manufacturers' Record.]

to the test of Thomas Jefferson, the founder of democracy, 'Is he honest, is he capable, is he faithful to the Constitution?' We are sovereigns, it is true, but are we not sovereigns in exile? Oh, when shall the king enjoy his own again!

"Here the old English strain, saturated with the principles of individual freedom and popular sovereignty, is preserved in all of its pristine purity. If this be, and it must be an average Southern audience, more than 99 per cent. of my hearers are lineally descended from sages or patriots of the Revolution, whose heroism and constancy made the nation possible. If the roll of this mighty gathering should be called, almost every name might be found in the register of births and deaths in the parish churches of the British Isles. Southern men of the homogeneous American stock were the chief architects who built the nation. The eloquence of a Southern man in the House of Burgesses in Virginia stirred the spirit of resistance to the tyranny of the British ministry. A Southern man drafted the Declaration of Independence. A Southern man led the armies of the Revolution, presided over the convention that framed the Constitution, and was the first President of the United States, and after the organization of the government, save for one term, for more than thirty-six years Southern men occupied the chair of the Executive. A Southern man was the chief justice who found the Constitution a skeleton, and whose majestic decisions clothed and vitalized it with life and beauty. A Southern man was that far-sighted political philosopher who added the territory to the westward of the Mississippi, comprising the States of Arkansas, Colorado, Iowa, Kansas, Louisiana, Minnesota, Missouri, Nebraska, Oregon, North and South Dakota, Montana, Washington, Wyoming, Idaho, the Indian Territory and Oklahoma, to the beautiful sisterhood which now forms the fairest and most hopeful government on which the sun has ever shone. A Southern man, contributed by our own beloved Georgia, that incomparable diplomat, John Forsyth, added to the Union the peninsula of Florida, an empire in itself. A Southern man announced to the Holy Alliance, then in all the insolent flush of its power, that we should consider any attempt on its part to extend its system to any portion of this hemisphere as dangerous to our peace and safety. This was the Monroe doctrine. It was a Southern President who, in the language of a modern historian, 'put fire into those few momentous, though moderate sentences, and made them glow like the writing at Belshazzar's Feast.' It was a Southern President who annexed to the Union the great empire of Texas, and who crowned the standards of our victorious armies by the treaty of Guadalupe Hidalgo, completing and expanding the symmetry of our system by the Territories of Arizona, New Mexico, Utah, and that magnificent domain now comprehended in the great State of California. Thus it is seen, save in the purchase of Alaska and the recent acquisitions, every step of American expansion has been accomplished under the administration of Southern Presidents. Such were the principles of Southern men, such their effective, constructive statesmanship, such their conceptions of national power when Southern men thought for themselves. How long now shall we surrender our own conceptions of our own interests, our own convictions upon the wisest policies of the nation in internal affairs, our views of that world-policy which the country must pursue to insure the salvation of the South and of the Union?"

In the discussion of plans for the deportation of negroes from the United States, an experiment in that direction made nearly forty years ago seems to have been forgotten. Abraham Lincoln, then President, favored the plan, if, indeed, he was not its originator.

In his first annual message to Congress on December 3, 1861, Mr. Lincoln, referring to the negroes already liberated through the operation of war and to those who might subsequently be freed by action of individual States, recommended that Congress take steps to colonize both classes at some place or places in a climate congenial to them. He added:

"It might be well to consider, too, whether the free colored people already in the United States could not, so far as individuals may desire, be included in such colonization. To carry out the plan of colonization may involve the acquiring of territory, and also the appropriation of money beyond that to be expended in the territorial acquisition. Having practiced the acquisition of territory for nearly sixty years, the question of constitutional power to do so is no longer an open one with us. The power was questioned at first by Mr. Jefferson, who, however, in the purchase of Louisiana, yielded his scruples on the plea of great expediency. If it be said that the only legitimate object of acquiring territory is to furnish homes for white men, this measure effects that object, for the emigration of colored men leaves additional room for white men remaining or coming here. Mr. Jefferson, however, placed the importance of procuring Louisiana more on political and commercial grounds than on providing room for population. On this whole proposition, including the appropriation of money with the acquisition of territory, does not the expediency amount to absolute necessity—that without which the government itself cannot be perpetuated?"

Lincoln's idea was embodied in the act of Congress of April, 1862, providing for the emancipation of slaves in the District of Columbia. By that act \$1,000,000 were appropriated to pay for the 3100 odd slaves and \$100,000 to meet the expenses of colonizing such of the freedmen as desired to go to Hayti or Liberia. In July of the same year provision was made for an appropriation of \$500,000 for the same purpose. In his message approving the act of April Mr. Lincoln expressed gratification that in the act the two principles of compensation and colonization had been recognized and practically applied. He reverted to the subject in his second annual message of December 1, 1862, in which he said:

"Applications have been made to me by many free Americans of African descent to favor their emigration, with a view to such colonization as was contemplated in recent acts of Congress. Other parties at home and abroad—some from interested motives, others upon patriotic considerations, and still others influenced by philanthropic sentiments—have suggested similar measures, while, on the other hand, several of the Spanish-American republics have protested against the sending of such colonies to their respective territories. Under these circumstances I have declined to move any such colony to any State without first obtaining the consent of its government, with an agreement on its part to receive and protect such emigrants in all the rights of freemen, and I have at the same time offered to the several States situated within the

tropics, or having colonies there, to negotiate with them, subject to the advice and consent of the Senate, to favor the voluntary emigration of persons of that class to their respective territories, upon conditions which shall be equal, just and humane. Liberia and Hayti are as yet the only countries to which colonists of African descent from here could go with certainty of being received and adopted as citizens, and I regret to say such persons contemplating colonization do not seem so willing to migrate to those countries as to some others, nor so willing as I think their interest demands. I believe, however, opinion among them in this respect is improving, and that ere long there will be an augmented and considerable migration to both those countries from the United States."

In his preliminary emancipation proclamation of September 22, 1862, Mr. Lincoln had announced that the effort to colonize persons of African descent upon this continent or elsewhere with the previously-obtained consent of the governments would continue, and in his subsequent annual message he recommended the adoption of an amendment to the Constitution that "Congress may appropriate money and otherwise provide for colonizing free colored people with their own consent at any place or places without the United States." Arguing for this amendment, he said he could not make it better known than it already was that he strongly favored colonization. He contested the objection that free negroes remaining in the country would injure and displace white labor, but added: "Reduce the supply of black labor by colonizing the black laborer out of the country, and by precisely so much you increase the demand for and the wages of white labor." On the other hand, he believed that deportation would benefit the freedmen. "Their old masters," he wrote, "will give them wages at least until new laborers can be procured, and the freedmen, in turn, will gladly give their labor for the wages till new homes can be found for them in congenial climes and with people of their own blood and race."

Lincoln's reasons for favoring the colonization of negroes were clearly set forth by him in an interview with a committee of their race in the District of Columbia at the White House on August 14, 1862. From a report made at the time of the substance of his remarks the following extracts are had:

"Having all been seated, the President, after a few preliminary observations, informed them that a sum of money had been appropriated by Congress and placed at his disposition for the purpose of aiding the colonization in some country of the people, or a portion of them, of African descent, thereby making it his duty, as it had for a long time been his inclination, to favor that cause; and why, he asked, should the people of your race be colonized, and where? Why should they leave this country? This is, perhaps, the first question for proper consideration. You and we are different races. We have between us a broader difference than exists between almost any other two races. Whether it is right or wrong I need not discuss; but this physical difference is a great disadvantage to us both, as I think. Your race suffer very greatly, many of them by living among us, while ours suffer from your presence. In a word, we suffer on each side. If this be admitted, it affords a reason, at least, why

we should be separated. You here are freemen, I suppose.

"A voice—'Yes, sir.'"

"The President—'Perhaps you have long been free, or all your lives. Your race are suffering, in my judgment, the greatest wrong inflicted on any people. But even when you cease to be slaves you are yet far removed from being placed on an equality with the white race. You are cut off from many of the advantages which the other race enjoys. The aspiration of men is to enjoy equality with the best when free, but on this broad continent not a single man of your race is made the equal of a single man of ours. Go where you are treated the best, and the ban is still upon you. I do not propose to discuss this, but to present it as a fact with which we have to deal. I cannot alter it if I would. It is a fact about which we all think and feel alike. I and you. We look to our condition. Owing to the existence of the two races upon this continent, I need not recount to you the effects upon white men growing out of the institution of slavery. I believe in its general evil effects on the whiterace. See our present condition—the country engaged in war, our white men cutting one another's throats, none knowing how far it will extend—and then consider what we know to be the truth. But for your race among us there could not be war, although many men engaged on either side do not care for you one way or the other. Nevertheless, I repeat, without the institution of slavery and the colored race as a basis, the war could not have an existence. It is better for us both, therefore, to be separated. I know that there are free men among you who, even if they could better their condition, are not as much inclined to go out of the country as those who, being slaves, could obtain their freedom on this condition. I suppose one of the principal difficulties in the way of colonization is that the free colored man cannot see that his comfort would be advanced by it. You may believe that you can live in Washington or elsewhere in the United States the remainder of your life, perhaps more so than you can in any foreign country, and hence you may come to the conclusion that you have nothing to do with the idea of going to a foreign country. This is (I speak in no unkind sense) an extremely selfish view of the case. But you ought to do something to help those who are not so fortunate as yourselves. There is an unwillingness on the part of our people, harsh as it may be, for you colored people to remain with us.'"

Lincoln contemplated starting a colony at coal-mining on a tract of country in Central America. The government there objected, and the attempt came to an end, while the canceling on April 16, 1863, of an incomplete agreement between the government and Bernard Kock for the movement of negroes from the United States to a dependency of Hayti, and the ordering on February 1, 1864, of a transport to the colony at Ile a Vache, on the coast of San Domingo, to bring back to Washington, with their effects, such of the negro colonists as might desire to return, marked the stages of a failure of the experiment. On January 28 of the latter year a Senate resolution called for a report showing what portion of the appropriations for colonization had been expended. Under date of March 7 the Secretary of the Interior reported that accounts of all persons to whom money had been advanced for the purpose had not yet been finally settled at the treasury; that a claim of Messrs. Forbes & Tuckerman for transporting emigrants to Ile a Vache had not been liquidated, and that the colonization fund was also liable for the expenses incurred by a special



agent sent to look into the condition of the colonists and for the expense of the vessel sent to return them, but that \$33,226.97 had been drawn from the treasury up to that time. The items of that amount are interesting as a commentary upon plans for assisted deportation under government auspices. They were as follows:

Amount advanced Hon. S. C. Pomeroy, special agent for colonization to Central America, \$25,000.

Amount paid James Mitchell to December 31, 1863, as agent of emigration, \$2838.46; for clerical services of W. B. Smith and Thomas R. Smith; for services of Rev. A. Bemar (colored minister), and for advance to J. E. Williams (colored), agent of A. W. Thompson, \$112; for office furniture and for the services of J. W. Menard in emigration office, \$60—\$3010.46.

Amount paid Hurxthal & Barnum for clothing sent to colonists at Ile a Vache, \$1786.33.

Amount paid Cronin, Hurxthal & Sears for clothing sent to colonists at Ile a Vache, \$900.

Amount advanced to D. C. Donnohue to defray his expenses as special agent to Ile a Vache, \$300; paid Wilson & Cammann for draft of D. C. Donnohue, \$750—\$1050.

Amount advanced Rev. R. R. Gurley, corresponding secretary of the American Colonization Society, to aid Rev. Chancey Leonard, pastor of the First Baptist Church in Washington city, in visiting Liberia with reference to establishing a colony on St. John's river, \$200; paid American Colonization Society for passage engaged for J. W. Menard to Liberia, \$95; to same society for passage to Liberia of three colored emigrants from the District of Columbia, \$285—\$580.

Amount paid J. W. Fitzhugh for furniture for emigration office, \$326.15; paid John P. Usher for traveling expenses to New York and back, and for advance to agent in the East, \$152.40; paid John D. Defrees, superintendent of public printing, for binding in paper 5000 copies "White and African Races," \$127.50; paid Watt J. Smith for traveling expenses to New York and back, \$52.40; paid Augustus A. Smith as clerk, \$118.33; paid J. W. Menard as clerk, \$50; paid Hallet Kilbourn for traveling expenses to New York and return as special agent to purchase clothing for the relief of the colonists at Ile a Vache, \$61.40, and paid Green & Williams for six cane-seat chairs, \$12—\$900.18.

In the annual report of the insurance commissioner of Maryland, which is a splendidly printed and bound volume, Mr. Lloyd Wilkinson, the insurance commissioner, shows that during 1900 insurance companies of every description in Maryland received \$10,788,595 as premiums and paid \$4,869,498 in losses, making the ratio of losses paid to premiums received 45.13 per cent. There are 227 companies doing business in the State.

The Board of Trade of New Orleans has selected Messrs. Robert McMillan, chief grain inspector, and John C. Fears, superintendent of elevators for the Illinois Central Railroad to the Northern and Eastern grain-shipping ports, to look into the grain-exporting business there, and to call greater attention to the magnificent facilities of New Orleans and its advantageous situation for the exportation of grain.

The completion of the assessments on railroad property in South Carolina shows that the taxable value of railroad properties will approximate \$26,000,000, and it is estimated that the railroads pay one-seventh of the taxes in South Carolina.

## WHAT ALABAMA MAY DO INDUSTRIALLY.

[Special Correspondence Manufacturers' Record.]

Birmingham, Ala., June 15.

The magnetic needle points to Polaris, but if it were attracted by simply iron and ocean navigators would be compelled to calculate their latitudes and departures from a central point having Birmingham as its pole.

It is an old story that Birmingham has risen financially, industrially and socially beyond the limits of comparison; that from a struggling little town twenty years ago it has grown to the magnitude of a beautiful city, where all the refinements that have taken hundreds of years to mature in other sections are found, and that England and Scotland have looked upon it as its most formidable rival in taking from Great Britain its supremacy in the iron industry. We can now change the Roman fable about Romulus and Remus, who are said to have been nursed by the wolf, and say that this magnificent abode of man's effort and industry has been fed by nature's gifts from the storehouse of creation. The handiwork of an Omnipotent Power has been fulminated by the lash of human conception and force to the services and needs of our age, and this in so short a lapse of time as to startle the mining and industrial world and revolutionize those very elements that have made the existence of our present civilization a possibility. Not having stopped in Birmingham for very many years, I almost shuddered when I was asked to lie over at this point, and so changed is the scene that I dislike to leave it. I write this because I know that there are many people who have not been here since the early eighties who feel as I felt, and I am glad to disillusion them. It is so unlike the Birmingham of the past and the other great mining and iron and coal-producing centers of America and Europe that one asks himself many times over if really he is not mistaken in his whereabouts. And the end is not yet.

The actual possibilities of this city cannot be estimated until at least 1920. We may make ourselves believe we know them, but I fear we are mistaken, because there are industries that are pre-eminently adapted to the Birmingham district that so far have not even been mooted—commercial and industrial propositions that can only come as by-issues of others. A few to point: The manufacture of novelties and cheap "made-in-Germany" hardware; paper mills as soon as you have suitable water; the manufacture of oil-well supplies, farming implements on a large scale, automobiles, traction engines, locomotives for the Spanish-American markets, mills for the working of ramie and other fiber, carpet factories, mining and quarrying machinery, petroleum-burning devices, etc.

There is no reason why Alabama should not supply the rails and equipments to the whole of the South and Central American and West Indian railroads. In those regions, where exist vast empires of neglected wealth and territory, capital must turn, and railroads and other permanent improvements of public utility must be undertaken. And where better than in Alabama can King Iron, together with all that is capable of constructing, be had? Aside from iron and steel (and steel here is in its semi-neglected infancy), there is a demand in South America alone for 5,000,000 tons of coal per year. These figures are only estimates, as when I collected the statistics in 1890 only 3,000,000 tons were imported, but the developments that have since taken place justify

my statement. Even if we should place the present imports at the old standard of 3,000,000 tons, it would equal about one-third of the probable output of Alabama for 1901, giving employment to 10,000 men in the mines alone, at an average of fifty-five cents per ton, equal to \$1,650,000 for labor, not including superintendents and incidentals. But all this talk about shipping is a chimerical dream until we can see the dawn of ship subsidy and the emancipation of the "American Galley Slave." Necessity brought America a tariff, and only a congested market and hard times will impress upon some of your good and earnest citizens the need of a ship subsidy. The vast increase in American coal production will soon require an American merchant marine suited to the coal-carrying trade or the temporary abandonment of your collieries until the day of subsidy. Without it such a marine cannot be built. In this matter the coal producers of Alabama are as much interested as the cotton mills and iron and steel producers are in the tariff. There are many who will be as much opposed to such a step by the government as I was ten years ago, when I spent hours discussing it with the late Col. Charles Hill, ex-Confederate officer, statistician to the State Department and apostle of American ship subsidy. But the pliable brain of an intellectual man should never encourage the petrification of wrong and soluble ideas. The coal interests of the Birmingham district need a ship subsidy, statements to the contrary notwithstanding, and only time can prove the correctness or fallacy of this statement. The coal possibilities of this region are far beyond the conception of the ordinary human comprehension, and every effort should be made by the people of Alabama to realize from them their maximum benefit.

I have just said that the coal possibilities of this region are beyond comprehension, because already the figures as to the supply are startling, that is, so far as the area is known to extend, and investigations will probably prove that it has not yet all been located.

The chief mine inspector, Mr. J. deB. Hooper, gives the following statement of production:

### ALABAMA COAL PRODUCTION.

Year.	Short Tons.
1889.....	3,572,893
1890.....	4,090,409
1891.....	4,750,781
1892.....	5,529,312
1893.....	5,270,042
1894.....	4,361,312
1895.....	5,705,713
1896.....	5,745,617
1897.....	5,893,771
1898.....	6,466,741
1899.....	7,484,773
1900.....	8,273,362

If anyone should in an off-hand way ask me what 8,273,000 tons of coal looked like I should be compelled to admit that I did not know. I have, however, gone into a few figures to give the world an idea of what all this means. As the increase in production is about 1,000,000 tons per year, I have brought the calculation down to the probable output for 1901 in place of 1900, and taken only 9,000,000 tons as the basis. We are now going to put all this coal in 20-ton cars, and we will have a short train of only 450,000 cars drawn by 18,000 standard-size locomotives. The length of the train, with headway room between sections, will be 2970 miles. If a man could walk twenty miles per day continuously it would take him, if the train were standing still, 148½ days to pass it. The coal, if used in the production of steam, would convert 72,000,000 tons of water into steam. The water necessary to make this amount of steam

would cover 11,250 acres and be five and one-half feet deep, and the rainfall from this steam's condensation would cover an area of 768 square miles 1.40 inches thick. This is a popular way of laying before the world the magnitude of what Alabama is doing in coal, but it has only started in its mission of human aid. To transport this coal all at one time by sea would take a fleet of 900 steamers of the vast carrying capacity of 10,000 tons each.

From the comparison of some twenty analyses that were submitted to me, I find that the average fixed carbon in the coal from this district is 61.31 per cent., but the coal is very low in ash, which adds to its value both for steam and coking purposes. The volatile substances, too, are mostly of an inflammable character, and with proper draft produce almost complete combustion. The importance of this field does not lie so much in the analytical proportions of the coal itself, but to its proximity to the sea, its coking qualities and the unlimited quantity of the supply. I am somewhat surprised that the volatile substances driven off in the conversion of the coal into coke are not utilized in making steam, etc. The consideration of this problem should tax the mental energy of the coke producers and the chemists, as from it valuable results may be economically derived, and a large proportion of the original value of the coal can be used in the production of steam-power, or the by-products can be collected.

Another matter that has been neglected in America is the use of the fine screenings from the washers as fuel. A number of tests that I have made in this connection justify me in stating positively that coal screenings ground to an impalpable powder and thrown into a suitable furnace associated with a little steam and a very small proportion of petroleum is one of the most efficient heat producers. This is worthy of attention. The question of the making of briquettes, too, should not be neglected, especially as the use of petroleum residuums would give a most valuable fuel.

Naturally, the fixed carbon that I have mentioned in the Alabama coal will make outside competitors say that the coal can only reach a limited market, but outsiders, perhaps, do not know that during my examination of the South American coking lignites I found that coals having over 50 per cent. fixed carbon could be made into a consolidated coke if the ash were not too high, and that these "consolidates" could be used in the place of anthracites. This proposition I submitted to the Engineering Magazine in 1897, and the process was only the compression of coke when it reached its molten point, and it became almost free of volatile substances. This invention is my own, but as I am only a professional man, and cannot consistently take out patents, I leave the suggestion to others, being satisfied that the artificial semi-anthracite that can be produced in the South will be superior to and cheaper than the natural anthracite of Pennsylvania. Some operators in this district claim that they can sell coking coal at Birmingham profitably at ninety cents per ton. If this be true, artificial semi-anthracite could be sold at less than \$2 per ton f. o. b. at ovens. It must be remembered that such coal, having about 92 per cent. fixed carbon and an average of 7 per cent. of ash, and only a trace of sulphur, would fill a long-felt want for domestic fuel, passenger locomotives and the merchant marine; in fact, it would be all that coke is, without occupying the great amount of space caused by the porosity of coke, and at the same time be free from the high percentage of sulphur



common to the anthracite. My province in examining the South is not to follow the beaten paths and say beautiful things about matters of which we are all cognizant, but to point out facts accomplished in order to lead up to greater possibilities so far as my limited knowledge can reach. I am confident that the metallurgical possibilities of Alabama are not yet fully understood, and there is no reason why it should not become the smelting center for many of the copper, nickel, tin, zinc and other valuable ores of the surrounding States.

Besides coal, an examination of the geological structure around Birmingham has convinced me that in the subcarboniferous sandstones underlying the shales in Shade valley and beyond Leeds in the territory crossed by the Central of Georgia Railroad there exists unquestionable evidences of natural gas, and that most probably petroleum may be encountered in more or less quantity. Of course, this is a "wildcat" district, so far as either of these products are concerned, but the indications are identical to what I found to exist in Taylor county, West Virginia, just before the Flemington Coal & Coke Co. struck gas on its property. If either gas or petroleum be found in this region, they will be of superior quality, and especially low in sulphur.

As is to be expected, the first few wells drilled in this territory may prove failures, but that does not prove the non-existence of natural gas and oil. In this connection I can point out the great gusher that a few years ago startled the world in Tioga county, Pennsylvania, and the fact that a "dry hole" was struck within 100 yards of this great well.

I do not wish to risk my professional reputation on so slight an examination, but from what I have observed I do not hesitate to state that the territory is one for legitimate speculation, and that natural gas does exist; as to quantity, that can only be proved by test wells.

Such are the fuel conditions of Alabama as at present known, although I fully believe that the coal area will be somewhat extended by the discovery of coal below the seams now being worked in sections not located as being within the carboniferous measures in the geological maps. The present area is claimed to cover 8555 square miles in extent.

The iron deposits are unquestionably wonderful, and necessary to give value to the coal in its local importance, as well as in the part Alabama iron is to play in the foreign markets.

The average metallurgical value of the ores in the Alabama field vary from 36 to 42 per cent. in self-fluxing ores, and from 42 to 53 per cent. in ores requiring artificial flux in metallic iron. At first glance the 36 per cent. ores will appear very low, but as a matter of fact they are not, as the flux comes associated with them.

The cost of producing iron in this belt will average about \$8.50 per ton, although a much less price is claimed by some producers, owing to the system of not accounting for depreciation of either mines or plants, etc. The price I have quoted could be materially reduced by the introduction of more improved methods and appliances, and unquestionably the iron producers will be taxed to their utmost in their future competition in the iron markets of the world whenever the market slumps if their plants are not brought up to standard. It is this very condition that is injuring the British iron trade, and one that should be guarded against by every American, especially in the South. Looking at Europe, we can appreciate the fallacy of not growing with the spirit of the times and of living in the placid illusion that what our fore-

fathers did is good enough for us. The embryo efforts of the past, while beautiful to look upon as the struggling attempts of a satisfied infancy, are not the maxims of an advancing age of mechanical improvements, and those of us who realize the advantages of progress should be ready to discard the new for the old. Improved labor-saving devices should be introduced into the mines and factories of the South in proportion to the increasing demand for labor. If this warning is not accepted the South will have no one to blame except the management of its enterprises, fostered in many cases by the eager desire on the part of shareholders and directors to reap temporary dividends at the cost of future progress and values.

Regarding the amount of pig-iron produced in Alabama, 90 per cent. of which is claimed for the Birmingham district, I quote the following from the proceedings of the Birmingham Commercial Club:

In 1880.....	68,925 tons.
In 1885.....	203,069 "
In 1890.....	816,911 "
In 1895.....	854,667 "
In 1896.....	1,083,906 "
In 1900, estimated.....	1,200,000 "

The production of limestone and dolomite in this district is an average of seven-eighths of a ton to each ton of pig-iron produced.

The above showing is as phenomenal as everything in the South, especially when we consider the years of depression that separated 1890 and 1900, and the fact that what is today is practically a reconstruction of the conditions ten years ago, and that the men who made all this possible have passed from the scene and their places taken, if not by more colossal figures, by those who have survived from the financial battle that swept out the past.

Alabama has before her the possibilities of supplying steel rails to South America and Africa, the two continents that are to play the most important role in expanding the "white man's burden" in this century. If the steel production is forced to its utmost possibility, there is no reason why Alabama rails should not be as well known the world over as the Damascus blade was known to the warriors of old. When is the time to do this? Never better than under the present financial conditions. Start the steel industry on a scale of sufficient magnitude, and the rest will take care of itself. South America, and Africa next, are the natural markets of America (Asia belongs to Europe), and the earlier the commercial battle is begun the sooner it will be won. People may talk about an "open-door" policy in Asia as much as they please, but it is well known that a little boy is not going to borrow cherries from his neighbor's tree, although he may leave the gate open or perhaps have no fence at all, if he knows his neighbor's bulldog is walking around the place or the old man is up the tree with a gun. And if America is going to have any considerable Asiatic trade, the Pacific coast wants it and deserves it.

America needs an Isthmian canal, a logical canal, one that can be built and will be built; not a favorite route to aid any clique or combine, but one that will be the shortest and best. Alabama and Mississippi will be the greatest beneficiaries.

C. F. Z. CARACRISTI, C. E. E. M.

#### In the Birmingham District.

[Special Cor. Manufacturers' Record.]  
Birmingham, Ala., June 18.

In the market for iron the past week there was nothing but the usual run of small orders. But it was not devoid of encouraging features. The volume of inquiries was very materially greater. Some large interests having large requirements that must be satisfied in the near

future were feeling the market, but the differences between buyers and sellers prevented business. At prices prevailing for iron the margin for profit is very moderate, and sellers are disposed to call a halt in the downward course of prices. They yet believe that there must shortly come a reaction in the market, and are greatly encouraged by the recent report of reduction of stocks. Some gray forge sold at \$9.40; some still hold for \$9.50, while there are others who quote all the way down to \$9. But those who quote the low figures have none for sale. No. 4 foundry sold at \$9.50. The same conditions surrounding gray forge apply to this grade. No. 2 foundry sold at \$10.50. There are reports of sales at lower values, but no one will father them. No. 3 foundry is \$9.75 to \$10, and No. 2 soft is on a parity with No. 2 foundry. Shipments continue to be of importance, but are almost altogether on account of old business. It looks as if we will soon have a revival in the export trade. When it does come it will have a material influence upon the market.

In steel the same favorable reports heretofore made are repeated. Seven of the furnaces at the steel mill are in operation, and a ready market promptly absorbs the output. Just as soon as it can be done the Republic Iron & Steel Co. will put its steel plant at the rolling mills in operation. It is safe to say that in ten days it will be turning out steel. Since the instalment of the new management of the Tennessee Company a number of changes among the officials have been recorded. The latest is that occasioned by the resignation of G. B. McCormack, who has for years been the general manager of the company. His successor is Charles McCreery, at present general manager of the Nova Scotia Coal & Iron Co. The change is effective July 1. The policy of the Tennessee Company seems to be directed to the concentration of interests at Ensley.

One of the Oxmoor furnaces is being dismantled, and the boilers and engines have been removed to the Ensley plant to add to the power of that plant. The Oxmoor plant will be continued with only one furnace. Another furnace to replace the dismantled Oxmoor furnace is contemplated at Ensley. There are reports of large additions to the industries at Ensley in the near future, among them a large rolling mill, a tinplate mill and a steel structural mill. Negotiations are undoubtedly in progress concerning the establishment there of important enterprises. There is a plan to open up the coal fields south of this city and connect them by a coal-carrying road to Montgomery or Selma, which would insure a certain all-the-year transportation to the Gulf ports.

J. M. K.

#### The Pig-Iron Market.

Matthew Addy & Co. of Cincinnati in their weekly report say:

"There has been a decidedly better tone to business during the past week. The general impression that there would be no considerable buying of pig-iron until the present labor troubles were settled has been shown to be unfounded, for there has been a lively demand. This has come from a number of the larger consumers, who have placed orders for from 2000 down to 500 tons for practically prompt shipment. There has been, in addition, the regular purchasing of carload lots for rush shipment. This carload buying has been a great feature of recent trading. In itself it has amounted to a fair tonnage, yet with the larger orders added to it the business of the week has been very satisfactory. The buying is not over yet by any means, as some excellent inquiries are now on the market

for pipe, foundry and mill irons. Should half of these inquiries be turned into actual orders, June would turn out to be a quite respectable month. There is some diversity as to prices, owing to different views held by ironmasters both in the North and South, but the publication of the May statistics, showing a heavy reduction in stocks, has already tended to steady the situation. It is becoming apparent that the strikes have not had the serious effect on consumption that was at first feared. Consumers themselves are short of iron, having, as far as we can learn, none in stock. It is surprising how close in this regard some large concerns are running. A delay of a day or two in shipping has caused several of them to temporarily shut down. Altogether, the prospect is much more encouraging than it has been for some time."

#### Want Window-Glass Factory.

Any individuals or firms contemplating the location of factory for the production of window glass are invited by the Young Men's Commercial Club, E. L. Robins, secretary, to investigate the advantages of Meridian, Miss., as site for such an industry.

#### Charleston to Northern Ports.

A dispatch from Charleston, S. C., states that the Merchants' Exchange of that city has under consideration the formation of another steamship line between Charleston, New York and Boston. It is possible that arrangements will be made with what is known as the Atlantic Coast Steamship Co., which has two vessels in service between Georgetown, S. C., New York and Boston. The service at present is confined to the lumber trade, but it is stated the company has offered to put on more ships to carry the Charleston business if sufficient encouragement is offered.

#### Literary Notes.

Among the articles in the July number of Cassier's Magazine of illustrated engineering are: "Railway Engineering in China," by T. Johnstone Bourne; "Electric Cable-Making in Great Britain and on the Continent," by a staff correspondent; "A New Working Day in British Shops," by Joseph Horner; "The Efficiency of Marine Boilers," by G. M. Brown, B. A., Wh. Sch.; "Locomotive-Building in the United States," by John H. Converse, president of the Baldwin Locomotive Works; "Waste Heat and By-Products from the Blast Furnace," by William Whitwell, president of the Iron and Steel Institute.

Current History for June opens with a very able and pithy, critical estimate of the life-work of Lord Salisbury, "the proudest aristocrat in England," written from an opponent's point of view. The leading topics of the month are the situation in China, the nightmare in South Africa, Russo-Japanese relations, Cuban question, suffrage question, Pan-American Exposition, opening of New Ontario, the British budget, the invisible spectrum and the pros and cons of trusts.

A dispatch from Fairmont, W. Va., states that the Fairmont Coal Co., with a capital of \$12,000,000, has been organized and has secured control of mines with an annual output of 6,000,000 tons of coal and representing thirty-seven plants, employing 4000 men.

The week ended June 15 in the Joplin (Mo.) district was the most notable in the year in the amount of ore sold. The total sales were 12,914,140 pounds of zinc ore and 1,781,540 pounds of lead ore, valued in all at \$197,377.



## SOUTHERN SHEEP-RAISING.

## Practical Suggestions About Its Encouragement.

Editor Manufacturers' Record:

The letter of Mr. Caracristi in relation to the cur dog is somewhat a puzzle to me. He seems to have taken seriously my criticism of the census authorities for not taking the census of the dogs. It never occurred to me that such a count had ever been thought of, or that in the last census an effort had been made to make one, or that it could have wholly failed, yet such were the facts.

Mr. Caracristi remarks, "It is strange that the American government should often employ inexperienced amateurs to compile such an important work as the census." Whatever may have been the justice of that criticism in past years, I can assure Mr. Caracristi, from personal knowledge, that the present superintendent of the census, Mr. Merriam, has resisted political "pulls" and has appointed at the head of different departments men of great experience and capacity. I feel well assured, from what I already know of the methods and results, that the present census in all its departments will excel any similar piece of work ever done in this country or any other. Moreover, the perfection of this work will be one of the most important evidences of the necessity of establishing a permanent census bureau. For instance, I made an effort in 1880, when taking the census of the cotton manufacture, to have included a census of the cotton ginneries of the South. The effort was made, and it wholly failed. Under the present efficient management and system of co-operation a census of ginning establishments has been made. The data of the quantity of cotton ginned in the last cotton year has been collated in bales. It has been compared with the later commercial figures of the cotton crop at the end of the cotton year, September 1, and has been proved so close to the final figures as to lead to the expectation that a permanent census bureau may hereafter be able to declare the quantity of cotton ginned by the number of bales of each crop at least three or four months before the commercial figures can be made up, say by May 1 in each year. What could be more vital or essential to the stability of the cotton trade than to get such absolute data year by year at the end of the cotton-ginning season, and almost at the beginning of the planting season?

I did not compare Massachusetts and Rhode Island. I did compare Massachusetts and New Hampshire. Nor do I recognize the remark imputed to "a Boston gentleman in a conversation at the Hotel Cesel, London," which Mr. Caracristi relates: "It is beastly, my dear boy, to have to go back to America and leave the society of these good English people. I really can't see why the New England States ever wanted to leave the mother country." I can assure Mr. Caracristi that such a person would not be recognized as a gentleman of Boston in this city, notwithstanding the fact that the necessity of commerce, even without the free choice of the people, must lead to a closer and closer alliance of the English-speaking people of the world, to a greater and greater recognition of the true grounds of union, and the utter removals of any ground for continued prejudice and passion in their relations with each other.

Now about the cur dog. If I understand Mr. Caracristi's letter, he means that the cur dog has not prevented sheep-raising in the South for about twenty years. If that is the fact, what has prevented, and where are the sheep? What is it that stops the renovation of the sandy

uplands in the Piedmont district and in other sections by putting sheep upon them? Is it lack of intelligence? I should hesitate to impute that to my Southern friends. I prefer to believe that it is the cur dog. My own observations in my not infrequent trips as far as Atlanta, sometimes on other lines, every two or three years for the last twenty, confirm me in the belief that the yellow dog is the bane of many of the Atlantic States; not any want of enterprise or intelligence on the part of the land-owners; in fact, when I advised the magnates of North and South Carolina at the last Atlanta Exhibition, but three or four years since, to remove the present emblems from the seals of South Carolina and Georgia and to substitute the yellow dog rampant, with the motto "Cave Canem," they caved in and acknowledged the cur. Perhaps they did not know the facts as well as Mr. Caracristi appears to know them.

I have lately visited some parts of Virginia, which State contains some of the most productive and most profitable farms that exist in this country, as well as some that are carried on in the most shiftless way. Through miles and miles of well-cultivated land I saw hardly any stock that could meet any claim to merit; only on one farm where the best buildings, the best fences and greatest evidences of thrift were to be witnessed, did I also see a single flock of well-bred sheep. Now, everyone who knows anything about agriculture theoretically, if not practically, knows that it was the introduction of the turnip into England from Holland and the folding of sheep on exhausted farm lands that brought British agriculture up to its very high standard. Everyone who knows anything theoretically, if not practically, about agriculture knows that where sheep can be folded and protected they are renovators of exhausted land, even of blowing sands. Large areas of blowing sand at Norfolk, England, have been converted into productive market gardens by folding sheep first fed from without, later fed from the products of the sand itself. Almost every county in England and Scotland now has its special breed adapted to its own conditions.

Mr. Caracristi remarks that "the poor man has almost disappeared from the South, and where twenty-five years ago you saw two cubs romping in the field, you will probably see two horses and four cows grazing today." I only hope that is true, but the figures of the census do not show it. The proportion of stock has moderately increased in recent years, but the proportion of stock in the Atlantic and Gulf cotton States is so much less than that in the Western or corn States as to fully account for the disparity in their products.

Some time ago I compared the relative value of the products of counties in the East, West and South according to the census of agriculture of 1890. I cannot lay my hand on the computation. There were seventeen counties north of Mason and Dixon's line credited with product in excess of \$10,000,000 each, four \$10,000,000 to \$17,000,000, most of them of about uniform size. St. Lawrence county only, a great cattle county of New York State, being a very large county. The two most productive counties are in Pennsylvania, two next in Massachusetts, others widely scattered. In the South a much less number of counties were credited with less than \$10,000,000 and over \$5,000,000. What was the reason? Apparently due to the proportion of stock or to proximity to cities from which great amounts of stable manure were carted. I think these figures demonstrated the absolute con-

nection of success in field crops in ratio to the proportion of stock on the farms or stable manure near.

I am glad to see that the subject is becoming a matter of discussion. Inertia is the worst enemy of progress. The only axiom or proverb suitable to be applied to farming, especially in the South, may be a very old proverb slightly changed. "Every farmer should learn that wherever his lot may be cast to learn therewith to be discontented." I do not mean to become a grumbler, because everyone knows that no further lesson is needed on that line. Wholesome discontent with all existing methods is pervading the West, leading to such a revolution in agriculture as has never been witnessed before. When wholesome discontent pervades the great body of persons occupied in agriculture in the South sheep-growing will not be stopped either by the cur dog or by inertia. Within another generation this country will export fine wools of every grade, and will compel the wool-growers of other sections to give up the semi-barbarous methods of the pampas of the Argentine, of the stations of Australia and of our ranches in the Western Territories, and to adopt intelligent and intensive methods, of which the Piedmont plateau and the uplands of Georgia, Alabama and Mississippi will become the great and intelligent center.

EDWARD ATKINSON.

Boston, June 12.

## OIL NOTES.

## Facts About Petroleum and Its Uses.

A dispatch from Richmond, Va., states that options on possible oil lands a few miles north of Marion, Va., are being taken.

Major T. T. Wright of Nashville has returned from a tour of the oil fields in Overton, Fentress and Pickett counties, Tenn., and reports seven wells in the immediate neighborhood of Spurrier and Pickett counties producing oil in paying quantities.

It is stated at Beaumont that three separate strata have been developed in the Guffey well at Sour Lake, Texas, one at a little below 300 feet yielding twenty-five to fifty barrels, one at 509 feet from which 100 to 200 barrels may be pumped, and one at 800 feet from which 200 barrels may be pumped a day.

A dispatch from New Orleans states that seven of the largest sugar plants in St. Mary parish, Louisiana, have decided to substitute oil for coal as fuel, and that it is thought that one-third of the Louisiana sugar plantations will use oil instead of coal this year. It is estimated that while it will cost \$35,000 to adapt the furnaces of the seven plants in St. Mary parish to the use of oil, that \$50,000 worth of that fuel will be as effective as \$150,000 worth of coal.

In a report on the advisability of using oil for fuel in Fort Worth city's furnaces City Engineer John B. Hawley and Superintendent of Water-Works A. W. Scoble say: "In well-designed and well-regulated power plants one pound of crude petroleum is equal in evaporative power to two pounds of good dry bituminous coal. One barrel of petroleum of forty-two gallons weighs nearly 300 pounds; this is equal to 600 pounds of coal, or three and a-half barrels of oil equal one ton of coal. This rule is only approximate, as coal and oil vary in the amount of heat units they contain. Therefore it would not be safe to figure on less than four barrels of oil to one ton of coal. To compete in price with coal,

oil would have to be delivered at the city's plants at 62½ cents per barrel, with coal at the plants at \$2.50 per ton—the amount the city is now paying for the same."

## HIGH EXPORT RECORD.

## Estimates of the Movement During the Fiscal Year.

Exports from the United States in the fiscal year 1901, now about to end, will probably reach \$1,500,000,000, the highest point ever recorded for a single year in the history of our export trade. For the eleven months ending with May, 1901, the total exports were \$1,385,013,595, being double those of the corresponding period of 1889, and \$100,000,000 in excess of the total for the eleven months of last year, which broke all previous records. Taking the commerce of the eleven months ending with May of various years as the basis of comparison, the figures of the Treasury Bureau of Statistics show that during the period under review our exports in 1889 amounted to \$694,133,804, in 1894 to \$834,636,085, in 1899 to \$1,130,629,075, in 1900 to \$1,285,831,125, and in the present year, as already stated, \$1,385,013,595, while for the full fiscal year our total exports give promise of exceeding \$1,500,000,000, as the eleven months' figures only fall \$115,000,000 short of that amount, and the monthly exportation of merchandise from the United States has exceeded \$120,000,000 since March 1 of this year.

The distribution of our exports during the year among the grand divisions, basing the estimate upon the percentages for ten months already available, will be in about the following proportions: To Europe \$1,155,000,000, as against \$1,040,000,000 last year; to North America \$135,000,000, as against \$187,300,000 last year; to South America \$44,000,000, as compared with \$38,900,000 in 1900; to Asia \$48,000,000, as against nearly \$65,000,000 in 1900; to Oceania \$36,000,000, as against \$43,400,000 last year, and to Africa \$26,000,000, as against \$19,500,000 in the preceding year. It will be observed that the only decreases will be in our exports to Asia, where unsettled conditions in China have seriously affected trade, and to Oceania, from which Hawaii has been omitted as a foreign country since its organization as a Territory of the United States.

To products of agriculture is due the credit for the greater portion of the increase in our exports during the present year. In the ten months for which detailed figures are available products of agriculture were valued at \$811,591,955, and formed 65.53 per cent. of the total domestic exports; last year they amounted to \$717,372,746, and formed 62.21 per cent. of the total domestic exports. For the same period of this year manufactures aggregated \$339,310,614, and formed 27.40 per cent. of the domestic exports, while last year they were \$352,671,206, and formed 30.60 per cent. of the value of domestic exports. The exports of agricultural products for the full fiscal year will be about \$965,000,000, as against \$835,858,123 last year, while those of manufactures will be about \$405,000,000, as compared with \$433,851,756 last year. This decrease in the exportation of manufactures is due chiefly to the following causes: 1. The war in China, to which country our exports consisted largely of manufactured articles, and to which market alone our sales in ten months decreased from \$13,474,703 in 1900 to \$7,706,138 in the present year. 2. The transfer of Hawaii from the list of foreign countries to classification as a customs district of the United States, necessitating the omission from our exports of all goods passing between that island and the United States, and thus decreasing by approximately \$15,000,000 our exports for the year. 3. The omission for similar reasons of merchandise passing between the United States and Porto Rico, to which island we sent in the ten months of the present year merchandise valued at \$5,611,583, of which sum manufactures formed an important part, cotton goods alone representing over \$1,000,000.



## FOREIGN TRADE.

This department is designed to set forth opportunities for the extension of the trade abroad of American manufacturers, and to record facts about the rapidly-developing commerce of the South.

## Foreign-Trade Opportunities.

Consul Stowe at Cape Town, South Africa, states that leather in various forms is in great demand for footwear and harness. He states that the colonists are aware of the high grade of mining machinery made in the United States, and that already orders aggregating \$5,000,000 in value have been placed in this country for apparatus to be used in the gold and diamond district. An opportunity is also afforded American manufacturers to export railway equipment, cold-storage plants, telephone and telegraph apparatus, bridges, piping and structural iron.

## More Wharf Front.

The Illinois Central Railway Co. is endeavoring to secure authority from the city to construct 2100 feet of wharf front on the Mississippi river. The request is now under consideration. Mr. Hunter C. Leake, general agent of the Illinois Central, states that the additional wharf is absolutely necessary in order to handle the export and other freight business which the company has secured. With the wharves referred to, the Illinois Central will have in all about 4200 feet on the levee.

## Americans to Build It.

An American firm has secured a contract to build an elevator and warehouse at Leith, Scotland, to cost \$500,000. It will be used for handling and storing grain from the United States, will have a capacity of 1,000,000 bushels, and to discharge at the rate of 8000 bushels an hour. The metal for the structure, as well as the machinery, and even the timber and nails, will be brought from the United States. Electric-power will be used.

## Texas &amp; Pacific Terminals.

When the terminals under construction at New Orleans for the Texas & Pacific Railroad Co. are completed nearly one mile of wharf front will be afforded Westwego. A pier for shipping lumber, also a conveyor wharf, will be provided, as well as a warehouse 700 feet in length, which will be devoted entirely to export freight. It is expected to complete the grain elevator under construction by the beginning of the next grain-shipping season.

## Notes.

Messrs. Elder, Dempster & Co., operating the Elder-Dempster fleet of steamships, announce that they will open a branch office in Galveston about July 1.

United States Consul-General E. C. Bellows at Yokohama reports that America furnishes more than two-thirds of the rails for steam roads in Japan, having surpassed in low prices and promptness of delivery both England and Germany, which formerly held that trade.

The steamship Hackney recently cleared from Norfolk with 3200 tons of West Virginia coal, which will be used by the British government in South Africa. The Hackney also contained 2000 tons of other American products, such as provisions, cigarettes, wire and hardware.

At the annual meeting of the Canton Company of Baltimore Mr. Walter B. Brooks, Jr., was elected president; Alexander Brown, vice-president, and W. W. Janney, secretary.

## RAILROADS.

[A complete record of all new railroad building in the South will be found in the Construction Department.]

## Louisville &amp; Atlantic.

An official of the Louisville & Atlantic Railroad Co. in a letter to the Manufacturers' Record states that the new mileage to be built will connect two lines controlled by this company. It is expected to let contracts immediately for grading the extension, which will be twenty-seven miles in length. The track will be laid with 60-pound steel rail. The Louisville & Atlantic will be 105 miles in length when the proposed extension is completed. It penetrates extensive coal and timber lands in Eastern Kentucky, the coal being what is known as the splint variety, and connects with both the Louisville & Nashville and the Southern systems. J. P. Amsden is president, and A. T. Sabin, chief engineer, of the company, whose offices are at Versailles, Ky.

## Montgomery Northern.

In a letter to the Manufacturers' Record John W. Watts, president of the Montgomery Northern Railway Co., writes that surveys have been made for sixty miles of the line between Montgomery and Anniston, an estimated distance of 100 miles. The road will be operated by electric-power generated from streams along the route. Mr. Watts states that the Coosa river will be depended upon for considerable of the power. The route is through a country containing valuable mineral, timber and agricultural resources. H. R. Golson of Wetumpka is vice-president; J. E. Johnson of Montgomery, treasurer, and J. P. Knabe, also of Montgomery, secretary.

## Kansas City to St. Joseph.

Mr. P. A. Gibson, president of the Kansas City & St. Joseph Electric Railroad Co., informs the Manufacturers' Record that construction is now in progress on the road, which will be fifty miles long, extending between the cities mentioned. The Hall Construction Co. of Kansas City has the general contract, and has sublet it to the International Construction Co. of Detroit, of which C. H. Lawrence is agent. Mr. Gibson states that arrangements have been made for all equipment, and that the road is to be ready for operation by January 1.

## Sale of Street Railway.

A dispatch from Dallas, Texas, confirms the report that an Ohio syndicate has purchased the property of the Dallas Consolidated Street Railway Co., also what is known as the North Dallas Railway. The purchase represents about forty miles of electric line, and it is understood that the syndicate proposes carrying out the plan of the original owners to build the extension between Dallas and Fort Worth, to be operated in connection with the street-railway system. Pierre S. Dupont of Lorain, Ohio, is interested in the plan.

## May Float the Bonds.

A dispatch from Brunswick, Ga., states that the banking house of Kuhn, Loeb & Co. of New York has become interested in the Brunswick & Birmingham Railroad, being promoted by the company of which E. C. Machen is president. Mr. Robert Kuhn, senior member of the firm, recently made an inspection of the line as far as completed, also the proposed terminals at Brunswick, in company with President Machen. Two more cargoes of rails will soon reach Brunswick for the line, also additional rolling stock.

## To Consolidate Interests.

A meeting of the security-holders of the Birmingham railway and illuminating companies will be held July 18 to decide upon an issue of \$6,000,000 in bonds to be made by the corporation which represents the consolidation of these companies. It is understood that the majority of the security-holders are in favor of the step. The combination was made through Mr. H. M. Atkinson of Atlanta. The new company will have \$5,000,000 capital stock.

## New Virginia Project.

The Eastern Virginia Construction Co. has been organized to build what is known as the Fredericksburg & Rappahannock Railroad. This line is being promoted between Fredericksburg and Washington, Va., by way of Culpeper. A dispatch from Fredericksburg states that surveys are to be made at once. A. C. Willis has been elected president of the construction company; W. C. Coons, secretary, and C. J. Rixey, treasurer.

## Railroad Notes.

Figures compiled for the month of May show that 15,273 carloads of freight were handled at Memphis, Tenn., an increase of about 4100 cars over the corresponding month in 1900.

According to a dispatch from New Orleans, a site has been secured for the proposed union depot, and it is understood that the work of constructing it may begin during the present year.

A dispatch from Pensacola, Fla., is to the effect that the Louisville & Nashville Railroad Co. has become interested in the plan to operate a line of steamships regularly between Pensacola and New York. It is expected that a fleet of four vessels will be placed in service.

The Southern Railway Co. has arranged a new schedule for its train service between West Point and Richmond, Va., and Durham, N. C., by which a direct connection will be made with the York River Line of steamers running between West Point and Baltimore.

The latest circular of Messrs. Scott & Stringfellow, bankers and brokers, of Richmond, Va., shows that the gross earnings of eight railroad systems of the South in May last were \$9,680,060, an increase over the gross earnings of the same roads in May, 1900, of \$916,030, or 10½ per cent.

Stockholders of the Fort Worth & Rio Grande Railroad Co. have approved the decision of the directors to increase the capital to \$6,250,000. It is understood that the increase will be utilized in building the new mileage to connect with the Fort Worth & San Francisco, and to extend it to the Mexican border.

It is stated that the railroad companies interested in the proposed union depot of Charleston, S. C., have decided to apply for a charter at once from the State authorities and to complete an organization to build the structure. Plans have already been prepared. The estimated cost of the building and approaches is \$200,000.

C. F. Price of Lima, Ohio, is interested in the plan to build an electric railroad between Port Arthur and Beaumont, Texas, a distance of thirty-five miles, and it is stated has succeeded in enlisting Kansas City capitalists in the project. The road would be standard gauge if built, and extend through a portion of the Neches river valley.

Announcement is made from Jackson that Governor Longino will recommend to the Mississippi legislature provision for a geological survey of the State.

## TEXTILES.

[A complete record of new textile enterprises in the South will be found in the Construction Department.]

Correspondence relating to textile matters, especially to the cotton-mill interests of the South, and items of news about new mills or enlargements, special contracts for goods, market conditions, etc., are invited by the Manufacturers' Record. We shall be glad to have such matter at all times, and also to have any general discussion relating to cotton matters.

## Buffalo Cotton Mills.

The work of establishing the Buffalo Cotton Mills near Union, S. C., has progressed rapidly during recent months. The main building has been entirely completed, and about all the machinery is in position except the looms, and these will be installed soon. Twelve motors will distribute the electric-power for turning the textile and other machinery. One hundred and twenty-five operatives' houses have been constructed, each located on a lot with front lawns and rear yards. Electric-lighting and water systems will supply the dwellings, and the streets will be macadamized. There will be also an ice factory to supply the operatives and other employees. The reservoir for water will have a capacity of 25,000,000 gallons. This company was chartered about a year ago, capitalized at \$600,000, and its plant will have 33,000 ring spindles and 1200 40-inch looms. The mill town will be known as Buffalo. T. C. Duncan is president of company.

## \$200,000 Fine-Goods Mill.

Mention has been made several times lately of the movement for another cotton factory at Newberry, S. C. The promoters of this enterprise have obtained charter during the past week for the Molohon Manufacturing Co., capitalized at \$200,000, and will take immediate steps for the awarding of both building and machinery contracts, so that the completed plant may be ready to operate in a minimum time. The entire mill will be constructed and equipped upon the latest and best ideas of mill engineering, and the product will be a grade of fine cotton cloth not heretofore manufactured in the South. The spindles will probably number 10,000. The incorporators are Messrs. E. B. Wilbur, James McIntosh, M. A. Carlisle, J. M. Kinard, Z. F. Wright, C. C. Davis and others, leading business men, farmers and bankers. Mr. Wilbur is a cotton-mill superintendent of many years' experience, and is the active mover in the new enterprise.

## Huntsville's Latest Mill.

The projectors of the new textile mill for establishment at Huntsville, Ala., mentioned last week, have incorporated the Eastern Manufacturing Co. to erect, equip and operate the plant. Plans and specifications for a weaving and dyeing plant are in the hands of W. I. Wellman of Huntsville, who is one of the directors, and bids on buildings are being received. The incorporators are Messrs. W. I. Wellman and J. R. Boyd of Huntsville, Chas. L. Poor of New York, Arthur H. Lowe and George P. Grant of Fitchburg, Mass.; they are also directors for the first year. The capital stock is placed at \$50,000 for the present. Contract for the construction of the buildings has been awarded to the John P. Fulcher Construction Co. of Nashville, Tenn.

## 25,000-Spindle Branch Mill.

Having definitely decided some time ago upon constructing a branch mill at Columbus, Ga., the Bibb Manufacturing Co. of Macon has been rapidly pushing



the work of erecting the necessary buildings. The power-house is nearing completion, as is also the water-works plant to supply the factory and the operatives in the mill town. The main structures have been finished, and the machinery, of which thirty carloads are now at the site, is being installed in position. The spindles will number 25,000, and their product will be 80s to 120s yarns, from Egyptian and long-staple cotton exclusively. Cotton strings and other twine will be manufactured. The investment in this branch plant will probably be about \$500,000.

#### Adding Over 5000 Spindles.

Extensive improvements to the Avondale Mills of Birmingham, Ala., have been definitely decided upon, and the construction of additional buildings required commenced. Separate machine shop and clothroom have been built, taking those departments out of the main mill, leaving room for the additional machinery. This machinery will include 5184 spindles, 152 looms and necessary preparatory apparatus, entailing an expenditure of probably \$75,000. This increase in equipment will give the plant 38,880 ring spindles and 1152 28-inch looms in all, running on print cloths.

#### Doubling a Knitting Mill.

The Petersburg (Va.) Hosiery Co. writes that it will about double its knitting plant. Contract has been let for the erection of an additional back building, two stories high, 40x100 feet, to cost about \$7000. This structure will accommodate new knitters and other machinery that will bring the plant's equipment up to 200 knitters, thirty rib frames, fifty foot machines and forty machines for 108-needle goods. About 175 operatives will be employed. The increased production will be nearly 500 dozen pairs of hose.

#### \$26,000 Knitting Mill at Lafayette, Ga.

The knitting company reported recently as forming at Lafayette, Ga., has formally organized as the Elizabeth Hosiery Mills, with A. R. Steele, president, and W. H. Steele, secretary-treasurer-manager. Contract has been let for a two-story 50x170-foot building, and its construction is well under way. Contract for machinery has also been placed, product to be seamless hosiery, fast black. The capital is now \$26,000, which will likely be increased to \$30,000 or \$40,000 in the near future.

#### Textile Notes.

A company with capital stock of \$25,000 is being organized at Gadsden, Ala., for the establishment of a cotton knitting mill.

Dr. B. F. Calhoun of Beaumont, Texas, is corresponding with a party of Raleigh, N. C., who contemplates establishing a cotton mill at Beaumont.

The Social Circle (Ga.) Cotton Mill is pushing the work of erecting its buildings, and a number of tenement cottages for operatives will be erected also. This plant will have 5000 spindles, and is capitalized at \$100,000, with J. B. Robinson, president.

The Newnan (Ga.) Cotton Mills' No. 2 plant is about completed, nearly all the machinery having been installed. The new mill will have 10,000 spindles, representing an investment of about \$200,000. The No. 1 mill has nearly 10,000 ring spindles in operation.

The Quintette Manufacturing Co. of Eatonton, Ga., has about completed installation of its equipment, to include 3000 ring spindles for manufacturing

yarns, and will commence production from the next cotton crop. The company is capitalized at \$30,000.

The Middle Georgia Cotton Mills of Eatonton, Ga., is completing its building, and will have the machinery in place for manufacturing on the next cotton crop. This plant will have 5000 ring spindles and 100 broad looms. The company has decided to erect sixteen tenement cottages for its operatives.

The Falls City Jeans & Woolen Co. of Louisville, Ky., has installed the additional machinery referred to last week, and now has it in operation. The company has taken out 136 narrow looms, leaving 204 narrow looms, and has in place forty Knowles broad looms for making fancy cassimeres.

Statesville (N. C.) Cotton Mills, recently reported to about double its 6000-spindle plant, has contracted for additional building 50x120 feet, two stories high. The company states it will put in the addition at the start 2000 spindles, with cone winders, twistors and warpers, also ten cards. The new machinery will probably cost about \$40,000.

The Lewis Jones Knitting Co. of Winchester, Va., states that its branch mill at Brunswick, Md., announced last week, will only sew and finish goods. The goods will be knit at Winchester and shipped to Brunswick for the final preparation for market. Sewing and finishing machines will be bought suitable for high-grade ribbed underwear.

The Tennessee Line & Twine Co. of Elizabethton, Tenn., will entirely rebuild its factory that was partially destroyed by the recent floods. Besides rebuilding the old plant, a new building two stories high, 161 feet long, will be erected. This will make a total length of buildings 768 feet, and 40 feet wide. The new structure will cost \$8000. Plant to be in full operation by September 1.

Work is progressing rapidly on the Seneca (S. C.) Cotton Mills, and the plant will be ready for manufacturing on the next cotton crop. The spindles will number 10,000 and the looms 200; electric-power will be used, generated by steam engines. A quantity of the machinery has arrived and is being placed. The main building is four stories high, 220x77 feet, and there will be about fifty dwellings for the operatives. The company's capital stock is \$200,000.

#### QUOTATIONS OF COTTON YARNS.

By Buckingham & Paulson, New York, Philadelphia and Chicago, June 18.

No. 10s-1 and 12s-1 warps.....	12 @ 12 1/2
No. 14s-1 warps.....	12 1/2 @ 13
No. 16s-1 warps.....	13 @
No. 20s-1 warps.....	13 @
No. 22s-1 warps.....	13 1/2 @
No. 26s-1 warps.....	14 @
No. 6s to 10s bunch yarn.....	12 1/2 @
No. 12s-1.....	12 @ 12 1/2
No. 14s-1.....	13 @
No. 16s-1.....	13 @
No. 20s-1.....	13 1/2 @
No. 22s-1.....	13 1/2 @
No. 26s-1.....	14 @
No. 8s-2 ply soft yarn.....	12 @ 12 1/2
No. 10s-2 ply soft yarn.....	13 @
No. 8s-2 ply hard.....	12 @
No. 10s-2 ply hard.....	12 1/2 @
No. 14s-2 ply.....	12 1/2 @
No. 16s-2 ply.....	13 @
No. 20s-2 ply.....	13 1/2 @
No. 24s-2 ply.....	14 @
No. 26s-2 ply.....	14 1/2 @
No. 30s-2 ply yarn.....	15 @
No. 40s-2 ply.....	21 1/2 @ 22
No. 8s-3, 4 and 5 ply.....	12 @
No. 20s-2 ply chain warps.....	13 1/2 @ 13 3/4
No. 24s-2 ply chain warps.....	14 1/2 @
No. 26s-2 ply chain warps.....	15 @
No. 30s-2 ply chain warps.....	15 @ 15 1/2
No. 16s-3 ply hard twist.....	13 @
No. 20s-3 ply hard twist.....	13 1/2 @
No. 26s-3 ply hard twist.....	14 1/2 @

#### Cottonseed-Oil Notes.

The Havens Oil Co. of Beaufort county, North Carolina, has been chartered, with a capital stock of \$30,000. It is authorized to do a general cottonseed-oil-mill business.

A movement headed by H. M. Comer of Old Town, Ga., and W. W. Abbott and others of Louisville, Ga., is on foot to build a cottonseed-oil mill, water-works and electric-light system in Louisville. The necessary subscriptions have been raised and charter applied for.

The Florida Cotton Oil Mill has been organized at Jacksonville, Fla., by Tennessee capitalists, and will be located in that city. The new mill will have a capital of \$100,000. Among the officers of the company will be J. N. Amson, W. F. Hutchinson and T. G. Montague of Chattanooga, Tenn.

The Henderson Cotton Oil & Gin Co. of Henderson, Texas, has been chartered, with a capital stock of \$40,000. The company will manufacture oil and other products from cottonseed. The incorporators are H. L. Griffin, A. Wettermark, J. E. Hightower, A. E. Patterson and N. L. Marwilskey.

At the annual meeting of stockholders of the Merchants & Planters' Oil Co. of Houston, Texas, the following directors were elected: T. W. House, H. B. Rice, W. M. Rice, R. B. Rice, W. D. Cleveland, James A. Barker and H. Hencke. It was decided at the meeting to immediately commence the work of rebuilding the mill destroyed by fire last September and to push it to completion as rapidly as possible. The cost of reconstruction will be between \$170,000 and \$200,000.

The following are official quotations on cottonseed and cottonseed products as posted at the Cotton Exchange in New Orleans on the 15th inst: Prime refined oil in barrels, 38 1/2 cents per gallon; off refined oil in barrels, 36 cents per gallon; prime crude oil, loose, 32 cents per gallon; prime cottonseed cake, \$24 per ton of 2240 pounds; off do., nominal; prime cottonseed meal, \$23.50 per ton of 2240 pounds; off do., nominal; soap stock, loose, 1.05 cents per pound; linters, per pound, choice, 3 1/4 cents; A, 3 1/2 cents; B, 3 3/4 cents; C, 3 cents; cottonseed in sacks delivered in New Orleans, \$14 per ton of 2000 pounds; in bulk delivered in New Orleans, \$13 per ton of 2000 pounds.

Mr. H. Jacobs of Hamburg, Germany, a member of the Victor-Osten firm of importers of cottonseed oil, who is now making a tour of the South, speaks of the advantages of a line of steamers between New Orleans and Hamburg as follows: "The inauguration of a new line of steamships to ply between New Orleans and Rotterdam will increase the exportation of cottonseed oil from that port in the future. There is a wide demand for the product by concerns along the Rhine, and in order to reach those customers Rotterdam is our handiest distributive point. German manufacturing concerns are increasing their output of soaps, butterine and table oils made from cottonseed oil, and these concerns are scattered pretty much throughout the empire."

The latest addition to the Clyde Line, the steamship Apache, has been placed on the route between Jacksonville, Charleston and New York. She has passenger accommodations as well as capacity for a large freight tonnage, and will make a specialty of transporting fruit and vegetables in seasons.

A party of capitalists of New York, Pennsylvania and Maryland interested in lumber have been making a trip through Mississippi and Louisiana inspecting timber resources, though it is announced that the trip has not been made with a view to immediate investment in Southern timber lands.

## LUMBER.

[A complete record of new mills and building operations in the South will be found in the Construction Department.]

### LUMBER MARKET REVIEWS.

#### Baltimore.

Office Manufacturers' Record,

Baltimore, Md., June 19.

There has been a steady trade in progress in nearly all lines of the local lumber market during the past week, and conditions are not materially changed. The demand from out-of-town dealers is improving, while local concerns are purchasing in small lots to meet immediate requirements. In the building line there is a more active tendency, and some good-sized bills of lumber have been sold. Box factories are buying in small lots, and nearly all woodworking concerns are moving cautiously. In North Carolina pine the market is in fair shape, the demand steady and stocks moderate. Prices for the better grades are firm, but for rough lumber the demand is slow. The foreign trade in North Carolina pine is growing to greater proportions, and shipments to Hamburg and continental ports have been better than usual. White pine is very steady, with stocks equal to the moderate demand and values unchanged. Cypress is improving, and the demand steady, with values a shade better. The offering of poplar is more liberal, and values are steady, with a good inquiry for both home and foreign trade. The hardwood market is in a good position, and considerable lumber is going into consumption to supply the wants of out-of-town dealers. Oak is in good demand, ash is selling freely to wagon shops and other woodworking concerns, and there is considerable inquiry from furniture dealers for other woods. There is a moderate export business, and shippers are not accepting much new business, the foreign market being uncertain and advances not encouraging.

#### Norfolk.

[From our own Correspondent.]

Norfolk, Va., June 17.

Exporters and manufacturers of lumber at this port have had a fair volume of business during the past week, and, although it is difficult to divine the future of the market, experts in the trade look for a substantial business during the summer months. At all Northern and Eastern centers the demand for North Carolina pine is becoming more pronounced as the season advances, and for building purposes in Northern cities and their suburbs large quantities of material are going into consumption. From all sections in the North Carolina pine belt reports are favorable, mills being fully occupied on orders and stocks slightly above the normal. The foreign movement in North Carolina pine is of greater volume, and several large companies have made large shipments to Rotterdam and other continental ports. The better grades of stock, as a rule, are exported to the United Kingdom and Continent, and the demand grows greater each season. Planing mills are at present very busy, and have all they can do to fill orders, while prices for dressed lumber are firm throughout the general list. As to the general list of values for North Carolina pine, it remains firm for all desirable grades, but for rough lumber in box grades the market is slightly off, with the demand moderate. The offering of coastwise tonnage is moderate, with rates unchanged at \$1 to \$1.15 to Baltimore, \$1.50 to \$1.75 to Philadelphia, \$2.20 to \$2.25 to New York and Sound ports, and \$2.75 to \$3 to Boston and eastward.



**Savannah.**

[From our own Correspondent.]

Savannah, Ga., June 17.

A steady business in all avenues of the lumber trade here is now the rule, and in every milling section in Southern Georgia the development of the lumber industry is being vigorously pursued. Reports filed with the secretary of the Georgia Saw-Mill Association show that all the mills have plenty of orders on hand to fill, and the prospects good for a continuance of a good business and fair prices. Manufacturers are generally well satisfied with the outlook in the lumber trade, and are of the opinion that a steady demand will rule during the summer months. The last meeting of the Georgia Saw-Mill Association at Tifton was well attended, and a large amount of business transacted. The members of this association are all working harmoniously for the best interests of the trade, and by their united action the market rules very steady and prices well maintained, with stocks not accumulating to any extent. The shipments last week were 2,460,000 feet, nearly all by steamers, the only cargo by schooner consisting of 282,595 feet for New York. In the Brunswick section there is unusual activity among mills, and also considerable shipping at the ports of Darien and Brunswick. The demand from Northern buyers is brisk, and there is also a good foreign business being transacted. The crosstie industry is active, the demand from railroads being quite pronounced. Coastwise tonnage is in moderate request, and rates are about steady. Among the charters reported last week were the following: Schooner J. H. Parker, 498 tons, from Darien to New York with lumber at \$4.87½; schooner L. M. Law, 1155 tons, from Brunswick to New York with crossties at 14 cents. A number of Virginia capitalists were in the Brunswick section last week investigating its hardwood resources with a view to locating some extensive saw-mill plants. News was received at Tifton, Ga., last week of the destruction by fire of Baldwin & Lowe's shingle mill on the Georgia Southern & Florida Railroad.

**Mobile.**

[From our own Correspondent.]

Mobile, Ala., June 17.

The week under review has been a fairly active one in nearly all lines of the lumber and timber market of this port. There is a free export movement, and leading exporters predict a steady trade until the end of the commercial year on August 31. Leading lumbermen report business quite active, with values throughout the entire list very steady. At all milling sections adjacent to this port the various saw-mill plants have all the business they can manage, and the demand is now more decided than thirty days ago. Considerable lumber is going forward to Cuba, Central and South America and Europe, and in the coastwise industry one firm in this city has a contract to furnish the Cuban Railroad with 8,000,000 crossties, delivery to commence at an early date. Last week 1,076,205 feet of lumber left the port, and since September 1 89,574,800 feet have been shipped. The timber market is steady, sawn timber when placed upon the market bringing 12½ to 13 cents, with holders firm in their views. Shipments of sawn timber have been very liberal during the past sixty days, and during the past week 236,538 cubic feet left the port, while for the season the total shipments of sawn timber amounts to 6,491,392 cubic feet, against 4,310,331 cubic feet last season. Hewn timber is firm at 13 to 13½ cents per cubic foot. Hewn oak is in demand at 15 to 18 cents

per cubic foot; poplar at 12 to 12½ cents per cubic foot. There is a good demand for logs, cypress being quoted at 8 to 14 cents per cubic foot, poplar \$6 to \$8 per 1000 feet, oak \$8 to \$12 and cottonwood \$4 to \$5 per 1000 feet. Pine saw logs are firm, with a good demand at \$6 to \$9 per 1000 feet. Freight on timber and lumber continue to rule steady, with a moderate offering of tonnage. Charters reported are steamer Heathfield, 1371 tons, from Pensacola to Rotterdam with timber at 97/6, July-August; British steamer Deptford, 1378 tons, from the Gulf to United Kingdom with timber on private terms, and Norwegian bark Vanadis, 724 tons, from Pensacola to Buenos Ayres with lumber at \$14.

**Memphis.**

[From our own Correspondent.]

Memphis, Tenn., June 17.

There have been no particular developments of note in hardwood lumber circles here during the past week, though there has been an increase in the volume of business, the Memphis lumbermen sharing in the revival of trade, which seems to be becoming quite general. There are some complaints yet that business is not as good as should be, though there is no getting around the fact that there are more inquiries coming forward and more business being actually put through than for some time. The demand from the West is of a very satisfactory character. Large shipments of cypress and poplar have gone forward during the week, with some business in other leading woods. The trade with the domestic East and with the North has been of a very satisfactory character—better, in fact, than in any other direction, as the increased demand already noted has come largely from this source. The call has been best for ash and poplar in the higher grades, with a fair sprinkling of quartered and plain white oak and plain red oak. In ash the demand is best for inch firsts and seconds and under, and in poplar for one and two-inch firsts and seconds. Stocks are still noticeably small in some directions, notably in ash and poplar firsts and seconds and in cypress. The oaks are found here in abundance, with the exception of plain red, while the only accumulation of note is in cottonwood firsts and seconds. Gum stocks are here in plenty to meet the growing requirements. Prices are fully as firm as they were at the first of the month, and seem to show a hardening tendency all the while. There have been no open changes in either direction. Most of the business that is being put through is for immediate delivery. The interior mills of the district are doing a good business. In the softwoods the demand has been rather above the average, with the various mills and woodworking plants having all they could successfully handle. The building boom seems to grow apace with the passage of the weeks, and the dealers in the various building woods are reaping a richer harvest than usually comes their way at this time of the year.

**Lumber Notes.**

The saw-mill of R. G. Dennis of Corapeake, N. C., was burned last week. The loss is estimated at \$2300, with insurance \$1100. The owner will rebuild.

Spotswood, Turner & Co. of Mobile are reported to have secured a contract for furnishing 600,000 crossties to the Cuban Railroad. They will begin delivery at an early date.

Receipts of lumber at the port of New Orleans for the week ending the 14th inst. amounted to 2,621,000 feet, and for the season 120,418,135 feet, against 86,168,101 feet last year.

The Smith Branch Boom & Lumber Co. has been organized at Romney, W. Va. George S. Arnold is president; John J. Cornwall, secretary and treasurer, and George E. Harrison, manager.

The John H. Poe shingle mill at Lake Charles, La., was burned on the 13th inst. There was only \$3000 insurance on the mill, but it will be rebuilt at once and in operation inside of sixty days.

It is reported that Roush & Hubbell have bought the large hardwood milling plant of W. W. Hallam of Bullards, Ga. The purchase includes several acres of fine swamp timber on the Ocmulgee river.

The first cargo of lumber to be shipped from Pensacola to Bermuda will be loaded on the schooner J. C. Strawbridge by the Pensacola Lumber Co. The Strawbridge is a new schooner of 758 tons net.

The Pearl River Lumber Co. of Brookhaven, Miss., has recently passed under the control of W. T. Joyce, a Chicago capitalist, and D. J. Bachelder, Jr., they having purchased a majority of the stock from local holders.

The Roanoke Railroad & Lumber Co. of Money Point, a suburb of Norfolk, Va., is breaking ground and laying the foundation for a \$50,000 saw-mill. The company expects to have it in operation by the coming fall.

Messrs. Ellis & Ellis, lumber exporters of Baltimore, Md., have just received a carload of figured walnut from Missouri, and will be shipped to Europe to be manufactured into veneers. The wood is rare and very expensive.

The Tuscumbia Lumber & Manufacturing Co. of Tuscumbia, Ala., recently incorporated by local capital, has its plant in successful operation, and has already booked orders for more than a million feet of lumber.

The W. T. Mason Lumber Co. of Whittier, Jackson county, North Carolina, has been chartered, with a capital stock of \$75,000. W. T. Mason of Asheville, N. C., and E. H. Hale of Indianapolis, Ind., are the principal stockholders.

The Bladen saw-mill property and 14,000 acres of timber near Brunswick, Ga., have been sold to New Jersey capitalists represented by Carl W. Wrede of Morristown. The company will commence to operate the mill about August 1.

A curled walnut tree was cut last week in Heywood county, North Carolina, which was sold for \$1000, and another walnut tree of the same variety sold recently for \$1500. The timber is to be manufactured into veneers for furniture purposes.

The British steamship Nith was cleared last week from Pensacola, Fla., for Rotterdam with a cargo of 1,440,000 feet of lumber, valued at \$24,186. This cargo, while a large one, is surpassed in port shipments every week in both quantity and value.

The Old Dominion Creosoting Works, near Norfolk, Va., purchased by Mr. E. Christian of that place, are being rebuilt and will be extensively improved. The plant will be known as E. Christian & Co., and will creosote lumber. The company has a capital of \$100,000.

Shipments of lumber from the port of Mobile last week amounted to 1,076,205 feet, and for the season 89,574,800 feet. Shipments of sawn timber aggregated 236,538 cubic feet, and of hewn timber 33,904 cubic feet. The whole reduced to superficial feet amounted to 4,321,501.

The extensive lumber firm of J. B. Ransom & Co. of Nashville, Tenn., started up their new saw-mill in West Nashville last week. Messrs. Ransom & Co. lost two mills by fire some weeks

ago, and the new plant replacing the old ones will have a capacity equal to both combined.

The Crandall Toy Co. of Pennsylvania, which recently purchased timber lands in Murray county, Georgia, is building a railroad to the property from Dalton. The company will establish its plant at the new town of Kilmer. The town is laid out, and will be governed similar to Pullman, Ill.

At Sinking creek woods, near Monticello, Ky., there are six stave mills running day and night, each cutting from 5000 to 7000 staves a day. Shipments from this point so far this year amount to about 8,000,000, and the mills are expected to ship 12,000,000 more during the present year.

It is stated that Shea Bros. of Williamsport, Pa., have just purchased a tract of 20,000 acres of timber land in Sevier county, Tennessee, on which they propose to erect extensive saw-mills and turn the timber into merchantable lumber. This tract of land includes some of the finest oak and hickory forest in East Tennessee.

The Carolina Spoke & Bending Co. of Greensboro, N. C., has been incorporated, with an authorized capital of \$100,000. The incorporators are J. Elwood Cox, J. G. Foushee, C. P. Sellars, G. A. Smith, J. H. Whitt and J. E. Logan. The company will begin business with a capital of \$30,000. The principal office of the company will be at Greensboro.

The Georgia Saw-Mill Association, composed of leading yellow-pine lumber manufacturers of Georgia, Alabama and Florida, met in regular monthly session at Tifton, Ga., on the 11th inst. President H. H. Tift presided, with Vice-President W. B. Stilwell, Treasurer Martin F. Amorous, Secretary F. E. Wayner and a membership representing over half the yellow-pine output of the State, in attendance. Reports filed showed a marked improvement in the general condition of the market and a steady advance in prices. Price-lists, both interior and coastwise, were revised, and will be distributed to the trade through members of the association. The next meeting will be held at Tifton on July 16.

New York, Missouri, Pennsylvania, Maryland, North Carolina, Kansas, Nebraska, Oregon, Louisiana, Georgia, Idaho, Connecticut, Rhode Island and Florida have already made provision for representation at the Charleston Exposition, either in State buildings or in collective exhibits in the principal structures of the exposition company, while Michigan, Colorado, Utah, Minnesota, Tennessee, Alabama, Texas, California and Washington will have representation through commercial organizations, corporations or individuals.

The Merchants and Farmers' National Bank of Charlotte, N. C., is doing a good piece of work for North Carolina by circulating a pamphlet report of the address made at the last convention of the North Carolina Bankers' Association by President George T. Winston of the State College of Agriculture and Mechanic Arts on industrial education and the use of machinery essential to the development of North Carolina.

The Merchants & Miners' Transportation Co. has issued in attractive form for free distribution its summer tour book for the present season. The little publication contains sketches of the steady growth of the company's business, of the points of interest touched by its boats between Baltimore and Boston, and gives the details of eighty-four trips to well-known resorts reached by its connections.



## MECHANICAL.

### The Link-Belt Stair-Lift.

Mechanical work, whether of man or machine, consists in the moving of material, and mechanical progress is only increase in the rate of movement. In handling inert material it is well known that the continuous machine will carry far more in a given time than an intermittent apparatus requiring the same power for its operation. Yet it was not until the end of the nineteenth century that serious effort was made to convey people by continuously moving machines. The traveling sidewalk of the Chicago World's Fair was, to the world at large,

stores and shops, will equalize the value of first and second floors, and at railroad stations and in other places where large numbers of people are in constant passage from one level to another, provide an absolutely safe and inviting means of making the ascent.

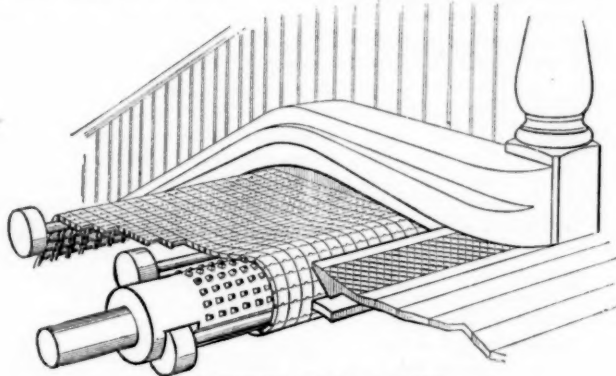
Such a machine must be continuous in operation, as otherwise free movement of people will be impeded. Large passenger elevators installed in one of the most prominent railroad stations in the country show a maximum of seven people per minute during rush hours.

A continuously-moving machine at the rate of ninety feet per minute will have six or seven times this capacity.

This machine must be absolutely safe

an ordinary stairway and into inclined surfaces representing the risers, and furnishes a solid, secure and level footing for passengers during the ascent.

of light weight, so that buildings of reasonable strength can carry the machine without the necessity of building special foundations for it.

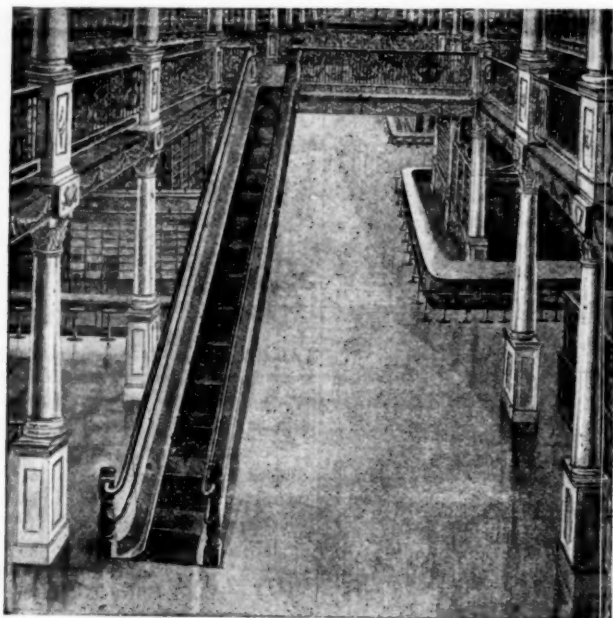


ANOTHER VIEW OF LIFT.

Its linked construction makes it possible to run the entire belt around a very small sprocket roller at the head of the stair-lift, and in close proximity to the dull edge of a plate level with the upper

The lightness of the apparatus and the fact that the moving weight is entirely carried on self-oiling rollers insures economy of power.

The equipment occupies but little space



LINK-BELT STAIR-LIFT INSTALLED.

the first demonstration of their advantage. The setting of this apparatus at an incline between two floors was obviously the next step, and such inclined elevators have been installed in a number of department stores here and abroad. Effort has also been made to replace the one-story elevator by practically detaching from each other the steps of a staircase, securing them independently and consecutively to an endless chain, and thus producing actual traveling stairs, but the cost, the large amount of space occupied and the difficulty of securing safety at the upper landing constitute formidable objections to this plan.

It remained for James Mapes Dodge, the inventor of elevating and conveying machinery, to present in the Link-Belt Stair-Lift a machine radical in its departure from precedent and complete in its fulfillment of all requirements.

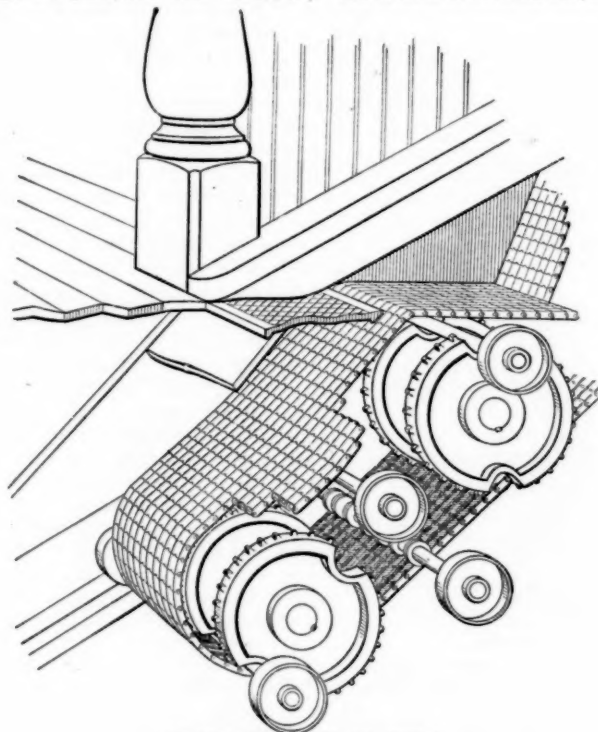
The existing demand is for a machine which, in department and other large

and convenient for the use of women and children, as well as of men; must be strong and durable, since the service is continuous, and must not be interrupted for repairs. It must be economical of space and capable of being harmonized with its surroundings for esthetic reasons. Its first cost must not be out of proportion with the value of its service, nor must the cost of operating be excessive.

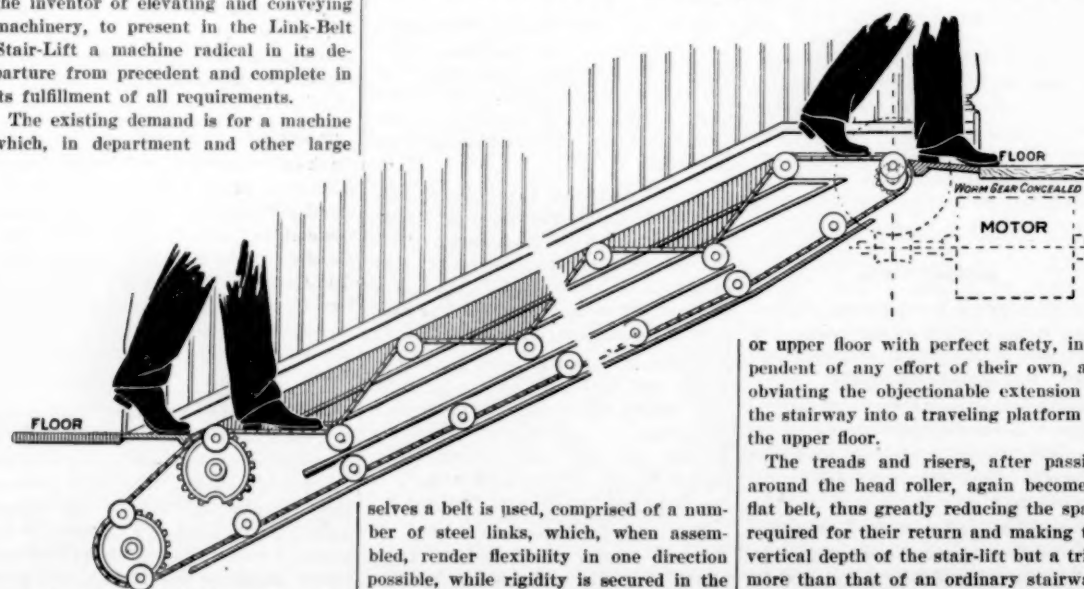
It is claimed that these requirements are completely met by the Link-Belt Stair-Lift shown in the accompanying photographic views.

This lift follows the form of the normal staircase, but in place of the steps them-

floor and slightly below the highest point attained by the surfaces of the treads upon which the passengers stand, thus delivering them upon the stationary plate



ANOTHER SECTIONAL VIEW.



SECTIONAL VIEW OF STAIR-LIFT IN OPERATION.

selves a belt is used, comprised of a number of steel links, which, when assembled, render flexibility in one direction possible, while rigidity is secured in the other. This belt is deflected into level portions corresponding to the treads of

or upper floor with perfect safety, independent of any effort of their own, and obviating the objectionable extension of the stairway into a traveling platform on the upper floor.

The treads and risers, after passing around the head roller, again become a flat belt, thus greatly reducing the space required for their return and making the vertical depth of the stair-lift but a trifle more than that of an ordinary stairway.

This construction makes an exceedingly strong, noiseless, durable and safe appa-

on either floor. Its width from rail to rail is three feet. The belt constituting the steps is twenty-one inches wide, experience having shown that greater width does not bring increased carrying capacity. The width of the steps and the slant of the risers prevent overcrowding and insure comfort to passengers when every step is occupied. Traveling at the rate of ninety feet a minute, with a passenger on each step, 3000 per hour can be elevated without crowding and without the delays due to waiting for an elevator.

A stair-lift operating between two floors of a building requires under maximum load but five horse-power of electric current, and, as no attendant is needed for loading or unloading passengers, its cost of operation is very low. It can be stopped instantly from either floor, and may be used as an exit when desirable.

The Link-Belt Stair-Lift may be inspected and tested at the works of the Link-Belt Engineering Co., Nicetown, Philadelphia, Pa., its builder.

The Huntsville (Ala.) Chamber of Commerce has elected R. E. Pettus, president; Oscar Goldsmith, vice-president; F. J. Thompson, secretary; Henry J. Lowenthal, treasurer.



**Modern House Heating.**

Vast strides have been made during recent years in heating and ventilation of buildings.

In the early study of the proper heating of homes it became evident that a system, to commend itself, should supply a mild, genial warmth without abstracting from the air its moisture and oxygen.

For the heating of private residences the hot-water system has been found entirely satisfactory and most economical.



FIG. 1.

In this system a pipe leads from the boiler in the basement to the water supply. From the boiler the pressure of the water forces the water into the pipes and radiators until all are filled. As the water begins to heat it becomes lighter, and is forced upward by the cold water in the return pipes. In this manner a constant circulation is brought about, and in passing through the radiators located at the various points throughout the house the

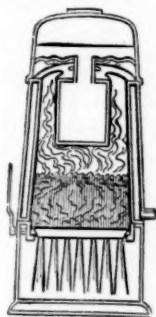


FIG. 2.

water imparts its heat to the iron, by which it is in turn diffused throughout the room.

Having lost the greater part of its heat, the water being cool, returns to the boiler through piping provided for the purpose, when the same process again takes place.

The hot-water system is easily controlled and regulated, meets all demands made upon it in the coldest weather, gives a mild and genial warmth, is not affected

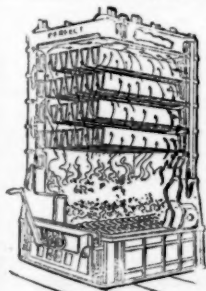


FIG. 3.

by the direction or force of the wind, does not fill the room with disagreeable odors and poisonous gases such as frequently arise from hot-air registers.

Through Messrs. Pierce, Butler & Pierce of Syracuse, N. Y., we place before our readers illustrations of some typical steam and hot-water boilers.

In this line are included those with round and square firepots, vertical and horizontal sections, packed joints, pushed and screwed nipples, magazine feeding,

surface burning, and with and without jackets.

In the designs employed in the construction of the best water boilers, the water, in returning to be reheated, circulates around and over the fire, insuring the absorption of practically all the heat units generated.

When the water is open to the atmosphere the pipes never become hotter than 212 degrees, and cannot ignite wood, nor can there be any explosion, there being no resistance.

Two features of paramount importance in the construction of an economic water boiler are the fire and water travels. In the illustrations this feature is clearly shown. The method of construction employed brings the greatest water surface over the hottest part of the fire, and the

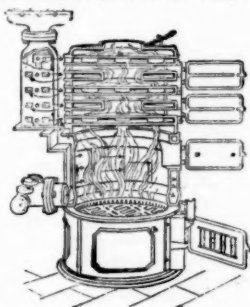


FIG. 4.

firepot section insures perfect combustion, no fuel being burned without direct benefit being received by the radiators. The Messrs. Butler & Pierce state that investigations show that one ton of coal by hot-air system will heat 1200 cubic feet of air, while the same quantity by the hot-water system brings to the same temperature 1800 cubic feet, an increase of 50 per cent., or for the same quantity of air, a saving of one-half in fuel.

The low-pressure steam-heating system is especially adapted for large buildings. Its initial cost of installation is somewhat less than the hot-water system, but this slight advantage is offset by increased fuel consumption. The desirability of steam-heating is most apparent where there are long lines of pipe connecting the boiler to the various radiators, and also

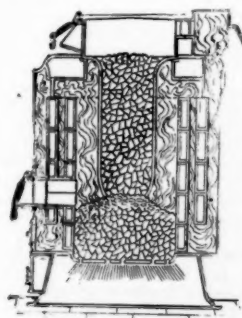


FIG. 5.

where the buildings are only heated at intervals.

Steam boilers are very similar in construction to water boilers. Steam gauges for indicating the pressure and safety valves for relieving the pressure when it reaches a certain point are provided.

The boiler in this system is only partly filled with water, allowing for the formation of steam, which, rising, fills the pipes and radiators. The heat communicated in this manner to the radiators is dissipated into the atmosphere of the room, as has been seen in the hot-water system.

Contact with the cold iron of the radiators causes condensation of the steam, and the water thus formed returns to the boiler, there to be again converted into steam.

When properly installed the pressure on

this type of boiler should rarely exceed two pounds, and requiring, as it does, but little water or attention, affords a noiseless, safe and convenient means of heating.

The varied conditions met with in the installation of steam and hot-water systems make the selection of a competent heating engineer of the utmost importance, and second only to the make of boiler, which should be selected with due regard to the reputation of the manufac-

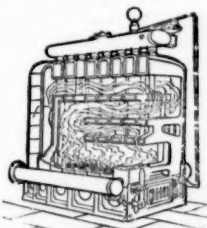


FIG. 6.

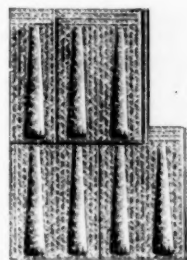
turer and the special requirements of the case.

Of boilers herewith illustrated more than twenty-five different styles are made, comprising over 200 sizes. This affords ample opportunity for a selection to meet any possible conditions. Over 100,000 of these boilers are in service, and embodying as they do all the features recognized as standard in the most advanced practice, their enviable reputation is firmly established.

**Metal Shingles for Roofs.**

A roofing material that will be durable, cheap and at the same time artistic is continually sought for. That metal shingles meet these requirements is claimed by the maker. The new galvanized embossed telescoping side-lock metal shingles illustrated herewith are manufactured by the Montross Metal Shingle Co., Camden, N. J.

Having the telescope side lock, an entirely satisfactory device, they form a first-class roofing. The embossing not only stiffens the plate, but prevents entirely the rattling of the roof in high windstorms.



GALVANIZED VICTOR SHINGLE.

Apart from the lightning, stormproof and fireproof qualities possessed by these galvanized shingles, they are greatly in demand for all best classes of buildings, churches and public buildings, not only for their durability, but also because of



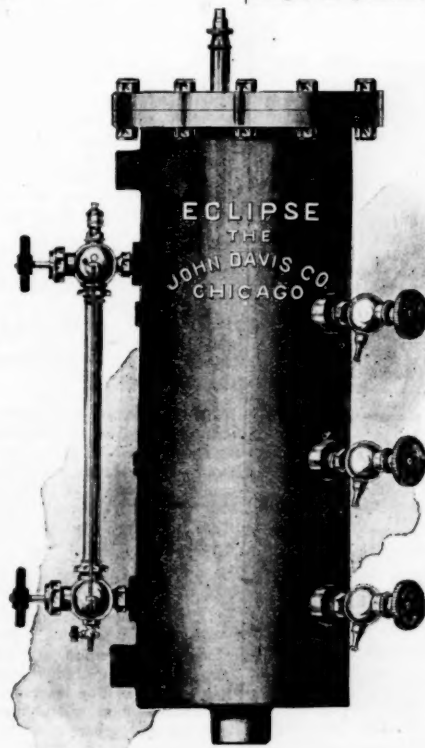
GALVANIZED OCTAGON SHINGLE.

their strikingly attractive appearance architecturally.

The Montross Metal Shingle Co. also makes all the appurtenances for high-grade roofing.

**Eclipse Safety Water Column.**

Boiler makers and users will be interested in the accompanying illustration of the Eclipse Safety Water Column, manufactured by the John Davis Co. of Chicago. This column is designed to take the place of the ordinary combination. The aim has been to make this device as simple as possible. Designed for both



ECLIPSE SAFETY WATER COLUMN.

These shingles are made of selected tinplates and galvanized after they are embossed and formed, which avoids all cracking and scaling off of the galvanized coating. By this method it believes it is supplying the best double-coated galvanized shingles in the world at a small additional cost over the ordinary process of manufacture.

high and low water alarm, the Eclipse column has few intricate parts, and is absolutely reliable; made with any variation between the alarms for the Hazelton, Cahall and similar boilers. The column is adapted for either right or left hand. All parts are attached to the top flange and can be easily removed. Write for further information.



## PHOSPHATES.

### Phosphate Markets.

Office Manufacturers' Record,  
Baltimore, Md., June 19.

In the local phosphate market there is a moderate business being transacted, with the offerings liberal and prices about steady for desirable grades of rock. There is some buying by out-of-town fertilizer men, but purchases are by no means extensive. At points of production there seems to be a better demand for export rock, and miners generally at all sections in the Southern phosphate belt are fully employed. From Tennessee reports are similar to those received a week ago, and the market, though quiet, possesses a strong undertone, especially for export rock. The various companies engaged in mining at Mt. Pleasant have confidence in the future of the market, and are holding the product at outside figures, both for domestic and foreign shipments. The tendency in South Carolina is toward a higher range of values, and the market is very steady, with a fair development shown among miners in Ashley river. Among phosphate miners in Florida there is considerable activity, and a fair demand for prompt shipment, while a few sales have been made for spring delivery in 1902. The demand for pebble is better than for hard rock. Holders are firm in their views as to prices, and the market closes steady, with some foreign inquiry. The following charters were reported last week: British steamer Sapphires, 1389 tons, from Tampa to Nantes with phosphate at 18/6, June; schooner E. G. Hight, 449 tons, from Port Royal, S. C., to Baltimore with phosphate on private terms; British steamer Hillcrag, 2081 tons, from Hamburg to Wilmington, N. C., with kainit at 8/6, June, and a British steamer, 1400 tons, from Hamburg to Port Royal, S. C., with kainit at 8/9.

### Fertilizer Ingredients.

The tone of trade in ammoniates during the week has been quiet, with stocks light and the list of values very steady. Sulphate of ammonia shows a slightly better tone; this also applies to concentrated tankage. Nitrate of soda is firm, with business quiet.

The following table represents the prices current at this date:

Sulphate of ammonia (gas)...	\$2 72 1/2 @ 2 75
Nitrate of soda, spot Balto...	1 85 @ 1 90
N. York	1 85 @
Blood .....	2 32 1/2 @ 2 35
Azotine (beef) .....	2 35 @
Azotine (pork) .....	2 35 @
Tankage (concentrated) .....	2 12 1/2 @ 2 15
Tankage (9 and 20) .....	2 30 & 10 1/2 @ 2 35 & 10
Tankage (7 and 30) .....	20 00 @ 21 00
Fish (dry) .....	27 50 @ 30 00

### Phosphate and Fertilizer Notes.

The domestic shipments of crude phosphate rock from the port of Charleston, S. C., from September 1, 1900, to June 14, 1901, amounted to 31,434 tons.

The British steamship Sidra cleared last week from Savannah, Ga., for Bremen with 2114 tons of high-grade Florida phosphate rock and other cargo.

The British steamship Cayo Soto was cleared last week from Pensacola, Fla., by the Gulf Transit Co. for London via New Orleans with 2938 tons of Tennessee phosphate rock and other cargo.

Mr. Paul Hirzel, secretary and treasurer of the Central Phosphate Co., one of the largest concerns operating in the Florida field, has sailed from Paris, France, and will arrive in Ocala in a few days.

Shipments of fertilizers from Charleston, S. C., from May 1, 1900, to April 30, 1901, were as follows: Railroads 376,805 tons, sail and steamers 6127 tons and various conveyances 2379 tons, making a

total of 385,311 tons, against 361,266 tons for the year 1899-1900.

The Mt. Pleasant Chronicle of the 12th inst. reports the phosphate market as follows: "Market quiet and unchanged. No large sales reported, but considerable inquiry for all grades. The movement continues about as last week, except that rains have checked shipment of rock kilned in open air. Sun-drying is going on largely in all the mines. Scarcity of labor is still complained of."

At the annual meeting of the stockholders of the National Fertilizer Co. at Nashville, Tenn., W. G. Sadler was elected secretary and general manager. The report for the past twelve months showed a very satisfactory condition of affairs. The doubling of the capacity of the plant was discussed and practically decided upon, and work on the necessary buildings will begin shortly. After the stockholders adjourned the directors met and elected officers as follows: J. H. McPhail, president; Dr. J. D. Plunket, vice-president; W. G. Sadler, secretary and general manager.

### TRADE NOTES.

West Virginia Coal Lands.—Coal lands in the famous Pocahontas and New River fields are for sale. For information address Box 111, Beckley, W. Va.

Oil Filters at Pan-American.—The powerhouse at the Pan-American Exposition is equipped with four Cross Oil Filters. These devices for the promotion of economy for oil users are manufactured by the Burt Manufacturing Co., Akron, Ohio.

Door and Sash Business.—A third or half interest in an established sash and door business is offered by a North Carolina plant. This is claimed to be a good opportunity for the right man. For information address "Woodwork," care Manufacturers' Record.

Knitting Mill for Sale.—An opportunity to secure a knitting mill now in operation is offered by Harry W. Paul, receiver, 115 South Front street, Philadelphia, Pa. The plant is located at Bristol, Pa., and can be visited for inspection by earnest investigators. Sale will be held July 10.

Correspondence Students at Pan-American. In view of the large number of students who will probably visit the Pan-American Exposition, the International Correspondence Schools of Scranton, Pa., have established an information bureau at their Buffalo (N. Y.) office in Elliott Square Building.

Condemned Engineer Property.—A public sale will be held at Fort Taylor, Key West, Fla., on July 13 of condemned engineer property, comprising scrap and railroad iron, scrap and pig-lead, naphtha launch, locomotive and tender, etc. For lists write to Thos. H. Rees, captain engineers, St. Augustine, Fla.

Stanley Electric Manufacturing.—The general offices and engineering department of the Stanley Electric Manufacturing Co. at Pittsfield, Mass., have removed into commodious quarters at the new works. Several other departments are also installed there, and by July 1 the new plant will be completely occupied.

To Make Mining Equipments.—Announcement is made of the completion of the plant of the Helmick Foundry-Machine Co. at Fairmont, W. Va. This plant is prepared to manufacture mine cars, drums, mine fans, screens, elevators, conveyors, charging laries, coaling-station machinery, truck wheels and general mining equipment, also building castings and others.

Water-Power for Development.—A valuable water-power in the Coosa cotton district near Talladega, Ala., is capable of development for manufacturing purposes, and parties of experience are wanted to acquire interest and promote developments. About \$7000 would be required to secure sufficient interest to prove value. For particulars address H. S. Hammond, Montgomery, Ala.

Flouring-machinery Contract.—F. C. Brumback of Hope Mills, Va., is moving his 50-barrel flour mill to Sandy Hook. He awarded contract for additional machinery he will install to the Barnard & Leas Manufacturing Co. of Moline, Ill. This Illinois maker

of flouring machinery is known wherever wheat is ground into flour for the excellence of its milling machinery and complete equipments.

Popular Cutterheads.—Lumber manufacturers not already acquainted with the merits of the Shimer Cutterheads should obtain particulars from the makers. These heads are low-priced, strong and durable. They carry their weight low down and in line of cut, and run like a top. They finish hard, cross-grained and knotty lumber neatly, showing clean-cut edges. Messrs. Samuel J. Shimer & Sons of Milton, Pa., make these heads.

Praising an Exhaust Head.—Messrs. Miller & Miller of Richmond, Va., write: "The exhaust head is giving entire satisfaction. It puts no back pressure on the engine, and does perfect work in separating the water from the steam. We will answer inquiries of anyone you refer to us." This was written in reference to the exhaust head made by the Sterling Blower & Pipe Manufacturing Co., Hartford, Conn., with New York office at 85 Liberty street.

Steel-Frame Buildings.—Manufacturing establishments are continually becoming better acquainted with the merits of steel-frame buildings for their plants. Such structures, specially designed and constructed by experienced companies, have numerous advantages over other styles of buildings. Messrs. Wm. B. Scaife & Sons of Pittsburgh, Pa., are having great success with their steel-frame structures. Prominent concerns are regularly giving contracts to the Scaife firm. Their latest contract is to design and construct buildings for the new plant of the MacPherson Switch & Frog Co. at Niagara Falls.

You Will Never Go Broke.—Certainly not if you possess as a pocket-piece the novelty that Messrs. E. C. Atkins & Co. of Indianapolis are distributing to their patrons and friends. The novelty consists of a metal piece representing a four-leaf clover, a horseshoe and the turkey wishbone, all well-known emblems of good luck. A new cent of the 1901 series is embedded in the center of the device. The inscriptions on the front of the novelty read "I bring good luck" and "Keep me and never go broke." On the reverse side appears reference to the satisfaction that is derived from the use of the saws, saw tools and kindred product manufactured by the Atkins corporation. The latter's Southern offices are at Memphis and Atlanta.

Improved Modern Casters.—Progressive manufacturers find that the old-style casters are out of date for application to modern furniture and kindred products. Casters have been greatly improved during recent years. The introduction of the ball bearing to casters has been the main cause of improvement, enabling the heaviest forms of furniture, etc., to be moved with the slightest effort. The Standard Caster & Wheel Co., 318 E. Twenty-third street, New York, is a leader in this branch of industry-manufacture of modern casters. Its product is stamped from steel or other wrought metal throughout, and is equipped with ball bearings. These casters do not break. For further facts write the company and request a few of its special advertising leaflets, and for sample caster.

Cameron Steam Pumps at Pan-American. Visitors to the Pan-American Exposition finding interest in steam pumps of the most modern design and best construction should not fail to call at Block 25, Machinery Building. This is the location of the exhibit of the A. S. Cameron Steam Pump Works of New York city. There are shown eight Cameron pumps in a variety of styles of the direct-acting type, and including the following: Regular type for general service, special boiler-feed pump, vertical piston mining pump, vertical plunger sinking pump, horizontal plunger station mining pump, sectional plunger sinking pump cut in sections for mule-back transportation, vertical engine and deep-well pump for artesian wells, and pump cut into sections to illustrate the mechanism and principle of operation of the Cameron type of pump.

Ingoldsby Automatic Cars.—Progressive managers of railway traffic desirous of increasing the profits from their department are earnestly advised to write for "Railway Economics," issued by the Ingoldsby Automatic Car Co., Chemical Building, St. Louis, Mo. This company manufactures a car that, to say the least, delights with its possibilities every far-seeing traffic manager. The company has received recently many large orders from leading concerns. One order, from the Colorado Fuel & Iron Co., calls for

100,000-pounds-capacity cars, 280 cars to be built according to Ingoldsby designs for wood construction and thirty-five according to the designs for Ingoldsby all-steel construction, which calls for only commercial shapes and plates. Another recent contract is for 1500 cars, while an order just signed is for five steel cars of 100,000 pounds capacity for use in the sand trade.

Mechanical Draft in Small Plant.—The advantages of employing mechanical draft in place of a chimney in a small plant are well displayed in connection with the boiler plant of the large country estate of F. G. Bourne at Oakdale, L. I. It is stated that "as it was necessary to prevent the formation of smoke, not only on the score of general appearance, but because of the proximity of the greenhouse, grates were provided for burning anthracite coal, and a forced-draft apparatus was installed, thus obviating the construction of a tall and possibly incongruous chimney. The mechanical-draft apparatus consists of a 24-inch-diameter steel-plate fan made by the B. F. Sturtevant Co. of Boston, electrically driven at 1500 revolutions per minute. The smokestack extends about thirty feet above the roof, as a square chimney, forty-five feet approximately above the level of the grate bars."

Its Manufacture Never Slighted.—Consumers are fully aware that many manufacturers at times slight the production of some specialty in order to meet competitive prices. Every manufactured article must, of course, have a profit added to the exact cost of its production, and the cheapening of this cost has been effected more by the use of labor-saving machinery than through any other means. In this connection it is desired to call the attention of those transmitting power by belting to the product of Messrs. I. B. Williams & Sons of Dover, N. H. This firm has manufactured for many years different lines of belting, among them being the famous Cochecho Belting. The manufacture of this belting has never been slighted, the manufacturers state, but it is offered strictly on its merits. These merits have attained for it an extensive field of usefulness in the manufacturing world. Write the Messrs. Williams for pertinent facts concerning their belting.

An Ideal Machine Shop.—One of the most interesting exhibits at the Pan-American Exposition, especially for metal-workers, will be the ideal machine shop that has been established and fully equipped for operation. About 2000 square feet is occupied by the shop, and the display is made with the object of introducing to users machine tools and metal-working machines that are strictly the specialization of the manufacturers represented. This display is conducted by the Prentiss Tool & Supply Co. of 115 Liberty street, New York city, associated with whom are the Cincinnati Milling Machine Co., Cataract Tool & Optical Co., Acme Machine Screw Co., Fay & Scott, Lodge & Shipley Machine Tool Co., Cincinnati Planer Co., Cincinnati Machine Tool Co., Rogers & Hemphill Machine Co., Bickford Drill & Tool Co., B. F. Barnes Co. and George Jontag & Sons Co. Such a representative combination of specialists in the invention and production of machine tools and metal-working machinery is ample guarantee that the equipments shown are the result of the most modern thought and construction. Visitors to Buffalo should not fail to call at Block 36, Machinery Hall.

Iron-Ore Lands—40,000 Acres.—It frequently occurs that legal action is taken in the instance of mineral lands with such results as place on the market valuable tracts of iron and other ore properties. In many instances sales arising from this action are made at prices that afford the buyers most excellent opportunities for profitable development or to hold for increased values. There are tracts of about 40,000 acres of land in Alleghany and Craig counties, Virginia, and Monroe county, West Virginia, that come in the above category. This land is in thirty-three lots, and it is located in the well-known Potts Creek valley. It was the property of the Potts Valley Mining & Manufacturing Co., and later of the Valley Ore Co. and a decree of court in the chancery case of Alex. F. Mathews, trustee, against the Valley Ore Co. has placed the property on the market. The lands contain iron ore, limestone and other minerals, and carry with them all the necessary privileges for using timber for mining purposes, for building and maintaining roads and shafts, etc. Messrs. John H. Holt and R. L. Parish, special commissioners, will offer the above property for sale to the highest bidder on July 2 in front of the courthouse at Covington, Va. For further particulars address Mr. Holt at Huntington, W. Va., or Mr. Parish at Covington.



# CONSTRUCTION DEPARTMENT.

**THE MANUFACTURERS' RECORD** seeks to verify every item reported in its Construction Department by a full investigation and complete correspondence with everyone interested. But it is often impossible to do this before the item must be printed, or else lose its value as news. In such cases the statements are always made as "rumored" or "reported," and not as positive items of news. If our readers will note these points they will see the necessity of the discrimination, and they will avoid accepting as a certainty matters that we explicitly state are "reports" or "rumors" only. We are always glad to have our attention called to any errors that may occur.

\*Means machinery, proposals or supplies are wanted, particulars of which will be found under head of "Machinery Wanted." In correspondence relating to matters reported in this paper, it will be of advantage to all concerned if it is stated that the information was gained from the Manufacturers' Record.

It often occurs that the organization of a new company in a town is not known by the postmaster, and hence letters addressed to the company are returned marked "not known." The Manufacturers' Record reports the first organization of all companies, and our readers, in seeking to get into communication with them, should be very careful in deciding how to address them, and it is often advisable to add the names of one or more incorporators as an aid to the postmaster in delivering mail.

## ALABAMA.

Birmingham—Iron Mine and Railroad Improvements.—The Tennessee Coal, Iron & Railroad Co. will issue \$15,000,000 of bonds, \$5,000,000 of which will be used in improving properties in the Birmingham district.

Birmingham—Electric Plants.—Final plans for consolidation of the Birmingham Railway, Light & Power Co., Consolidated Electric Light Co. and the Birmingham Gas Co. into one \$10,000,000 corporation have been completed. Among those interested are Harry M. Atkinson of Atlanta, Isadore Newman of New Orleans and Gordon Abbott of Boston, Mass. Mr. Atkinson is credited with stating that \$1,000,000 will be expended in improvements. Robert Jemison will be president.

Birmingham—Cotton Mill.—Avondale Mills will add 5184 spindles, 152 looms and other additional machinery, all of which has been ordered.

Birmingham—Pottery.—J. B. Price of Columbus, Ga., is investigating with a view to establishing a pottery near Birmingham for manufacture of jugs, etc.

Birmingham—Construction Company.—Chartered: Worthington Construction Co., with capital stock of \$20,000, by Thomas Worthington, Walker Percy and W. I. Grubb, to conduct general construction business in building of railroads, etc.

Birmingham—Oil Wells, Refineries, etc.—Reuben F. Kolb, M. J. Mullally, Richard Thomas and W. H. Hughes have organized Birmingham Oil Development Co., with capital stock of \$300,000, for operation of natural oil wells, constructing and operating refineries, mining coal, iron ore, etc.

Ensley—Rod Mill.—It is reported that the Tennessee Coal, Iron & Railroad Co. (Birmingham) has purchased the steel rod, wire and nail plant at Ensley of the Alabama Steel & Wire Co.

Ensley—Steel-hoop and Cotton-tie Plant.—F. L. Clark of Pittsburg, Pa., reported lately under Birmingham as having purchased Helena Rolling Mills and to operate same, is now reported as having secured site at Ensley and to construct plant for manufacture of steel hoops and cotton ties. It is understood that \$500,000 will be invested in the two plants.

Eufaula—Broom Factory.—Young & Enggram are interested in the establishment of a broom factory.\*

Falkville—Ore-land Development.—North Alabama Standard Oil & Gas Co. has reorganized, with J. L. Jones, president; J. J. Key, vice-president; A. W. Sharpley, secretary; J. H. Robinson, treasurer, and D. A. Smith, general manager. Company owns 7500 acres of land, and will soon begin boring for oil. Capital stock is \$200,000.

Gadsden—Knitting Mill.—A \$25,000 knitting mill will be established. Names of interested parties will be announced later.

Goodwater—Gin and Grist Mill.—A gin and grist mill will be erected at Big Spring. Names of interested parties will be announced later.

Huntsville—Cotton Mill.—Eastern Manufacturing Co. has been incorporated to establish the cotton mill reported last week, capital stock being \$50,000; incorporators are Chas. L. Poor of New York, Arthur H. Lowe and George P. Grant of Fitchburg, Mass.; W. I. Wellman and J. R. Boyd of Huntsville. Contract for erecting buildings awarded to John P. Fulcher Construction Co. of Nashville, Tenn. Plans and specifications for weaving and dyeing plant are with W. I. Wellman, who can be addressed.

Mobile—Oil Wells.—Mobile Oil Co. has been organized, with capital stock of \$25,000, for development of oil wells in Mobile county. Probably Mitchell & Tonsmeire can give information.

New Decatur—Oil and Gas Wells.—Alabama Oil & Gas Co., recently organized with capital stock of \$50,000, is making contracts for machinery and drillers.

Randolph County—Gold Mine.—Baltimore Mining & Smelting Co. (Wm. Hooper, 809 Union Trust Building, Baltimore, Md.) is preparing to increase capacity of its gold mines and within a year will probably have 100 stamps.

Repton—Lumber Mill, etc.—Bear Creek Mill Co., operating timber mill, will install lumber mill, erect dry-kilns, planing mill, new store and office and a larger electric plant.

## ARKANSAS.

Lake City—Oil and Mineral Lands.—Lake City Oil & Investment Co. has been incorporated, with capital stock of \$100,000, for development of the oil and mineral resources of Craighead county. P. T. Springer is president; Dr. J. L. Sancomb, vice-president, and T. L. Roussan, secretary.

Little Rock—Cotton Compress.—Chartered: Arkansas Compress & Warehouse Co., with capital stock of \$60,000, by C. C. Burrow, Z. Bennett and R. E. Morris, for establishing and operating cotton compress and warehouse.

Little Rock—Milling.—Chartered: J. M. Towns Milling Co., with capital stock of \$16,000, by J. M. Towns, G. L. Ranch and A. J. Ranch.

Little Rock—Jewelry Company.—Bayless Jewelry Co., with capital stock of \$25,000, has been incorporated by F. A. Bayless, president; H. C. Curtis and T. E. Helm.

Little Rock—Publishing.—Musical Topics Co. has incorporated, with capital stock of \$5000, for publication of musical journal; O. K. Houck, president.

Little Rock—Jewelry Factory.—Chas. S. Stiff has installed electric motors for increasing capacity of his jewelry factory.

Newport—Oil Wells.—Chartered: Newport Oil Prospecting Co., with capital stock of \$50,000, by Thomas J. Watson, president; Isaac Goodman, vice-president, and Thomas J. Craig, secretary.

Pine Bluff—Power-house.—Citizens' Light & Transit Co., reported several months ago as incorporated, has purchased site at \$3000 for proposed power-house. J. B. York is president.

Texarkana—Cotton Compress.—Geo. West and others have let contract for establishment of a large cotton compress.

Wilburton—Coal Mine.—It is reported that the Black Diamond Coal Co. will open a mine near Wilburton.

Witcherville—Flour Mill.—W. S. Stroud contemplates establishing a 100-barrel per day flour mill.\*

## FLORIDA.

Arcadia—Electric-light Plant, Ice Factory and Telephone System.—John J. Heard, Chas. C. Chollar and John L. Jones have incorporated the Arcadia Electric Light, Ice

& Telephone Co., with capital stock of \$30,000, for construction of telephone system, ice factory and electric-light plant.

Jacksonville—Cotton-oil Mill.—Florida Cotton Oil Co., recently reported under Chattanooga, Tenn., as incorporated, will establish its proposed mill at Jacksonville, Fla. Address W. F. Hutchison at Chattanooga.

Jacksonville—Lumber Company.—R. H. Paul of Watertown, Frederick W. Bucky and Charles F. Flynn have organized Jacksonville Lumber Co. for handling lumber, etc. Erection of dry-kilns will be commenced at once, and other large and extensive improvements made later on. New company represents the East Coast Lumber Co.

Kissimmee—Land Improvement, Mineral Development, etc.—United Land Co. has incorporated, with capital stock of \$1,000,000, for controlling the Disston lands, mining ores, phosphates, kaolin, etc., constructing drainage canals, etc. Frederick W. Hindekoper is president; Charles Miller, vice-president; C. W. Ward, secretary, and Frederick L. Hindekoper, treasurer. Company will have branch offices in Washington, D. C., and New York city.

Lake City—Brick Works.—H. C. Bailey, W. V. Long and C. R. Weller have organized Lake City Brick Co. for manufacture of common and pressed brick.

Lakeland—Telephone System.—Peninsular Telephone Co. of Tampa has franchise for construction of telephone system in Lakeland.

Miami—Starch Factory.—John J. McLaughlin, H. R. Wardwell and John H. Elderst, proprietors of De Land (Fla.) Starch Factory, will establish coontie-starch factory in Miami.

Okahumpka—Brickyard.—The brickyard reported recently (under Leesburg) has been built, and will be operated by the International Kaolin Co.

Pensacola—Cigar Factory.—Benjamin Caslo and Nicholas Gonzalez of Chicago, Ill., are investigating with a view to establishing factory at Pensacola with capacity of 3,000,000 cigars a year.

Starke—Water-works.—Contracts will soon be let for construction of proposed water-works system. Address Col. W. T. Weeks, chairman.

Tampa—Cigar Factory.—Havana Cigar Co. has been incorporated, with capital stock of \$30,000, for manufacture of cigars, cheroots, etc., by James B. King, Charles H. Summers and others.

## GEORGIA.

Atlanta—Transfer Company.—Chartered: King Transfer Co., with capital stock of \$10,000, by C. E. King and others.

Bladen—Saw-mill, etc.—New Jersey parties, represented by Carl W. Wrede of Morristown, N. J., have purchased and will operate saw-mill property and develop 14,000 acres of timber at Bladen.

Cartersville—Mineral Lands, Furnace, etc.—It is rumored that Pittsburg (Pa.) parties, represented by Mr. Britton, have purchased 400 acres of mineral lands from Capt. John P. Stegall of Emerson, Ga., for \$15,000 and will develop same and build an iron furnace.

Columbus—Cotton Mill.—Bibb Manufacturing Co. of Macon has been at work for some time on construction of branch mill recently noted as proposed; plant is nearing completion, and will have 25,000 spindles. There will also be water-works for mill town, power-house, etc. Investment is probably about \$500,000.

Griffin—Sewerage.—The city is considering the construction of sewerage system. Address "The Mayor."

Lafayette—Knitting Mill.—The company lately reported formed to establish knitting mill is known as Elizabeth Hosiery Mills, capital stock \$26,000, to be increased to \$30,000 or \$40,000 soon; building is being erected and machinery has been bought.

Macon—Brick Works, Barrel Factory, etc.—Bibb Brick Co., reported recently as incorporated by J. N. Neel and others, will install plant with daily capacity of 100,000 bricks; will probably use surplus power in manufacture of barrels, boxes, bobbins, etc.

Macon—Corn Mill.—S. R. Jaques & Tinsley Co. contemplates constructing a mill for grinding corn, either steam or water-power, and desires correspondence.\*

Rome—Agricultural-Implement Factory.—B. T. Haynes, W. W. Woodruff, W. H. Coker and others have incorporated Georgia Hay

Press Co., with capital stock of \$5000, for the manufacture of hay presses, farm implements, wagon tools, etc.

Savannah—Transfer Company.—Frank L. Pickering and H. H. De Loach have incorporated the Savannah Transfer Co., with capital of \$1000, to conduct transfer business.

Tifton—Brick Works.—J. S. Ship is establishing works with capacity of 40,000 bricks daily.

Valdosta—Telephone System.—City has granted franchise to Bell Telephone Co. of Atlanta for use of streets.

## KENTUCKY.

Ashland—Heel Factory.—Phoenix Heel Factory of Portsmouth, Ohio, will be removed to Ashland.

Cave City—Flour Mill.—Farmers' Mill Co. will rebuild its mill burned in May; will replace with a 50 or 75-barrel mill.

Frankfort—Oil Wells.—Chartered: Simpson & Allen Counties Oil Co., with capital stock of \$8000, by A. S. Walker, C. F. Saunders and others of Simpson county.

Kentucky—Lead and Zinc Mines.—Hoosier Mining & Milling Co. has been organized at Columbus, Ind., with capital stock of \$100,000, by H. F. Russell, president; H. F. Russell, vice-president; D. Ogden, secretary, and R. F. Everrood, treasurer. Company has leased 13,000 acres of land in Kentucky and will mine lead and zinc ore.

Lebanon Junction—Flour Mill.—Reesor & Duncan will build a 50 or 60-barrel flour mill.\*

Louisville—Medicine Factory.—Isador Flexner, L. T. Davidson, J. M. Ringo, E. Bloomfield and others have incorporated the Flexner Chemical Co., with capital stock of \$10,000, for the manufacture of proprietary medicines.

Princeton—Flour Mill.—R. N. Kevill & Son will remodel their flour mill.

Visalia—Corn Mill.—James M. Temple will build new corn and cob mill.

Wayne County—Oil Wells.—Chartered: Wayne Oil Co., with capital stock of \$300,000. Address Louis Paquet, New Orleans, La.

## LOUISIANA.

Jennings—Oil Wells.—Mamou Oil & Mineral Co. has been incorporated, with capital stock of \$200,000, for development of oil properties. J. S. Lewis is president; J. E. Ross, vice-president, and August Colbert, secretary.

Lake Charles—Oil Wells, Rice Cultivation, etc.—William E. Lee, Arthur A. Wentz, Jas. S. Thomson, Charles F. Briggs and others have incorporated English Bayou Oil & Rice Co., with capital stock of \$18,000, for development of oil wells, cultivation of rice lands, etc.

Monroe—Sewerage.—Shurman & Brown of Nashville, Tenn., have been selected engineers to superintend construction of Monroe's sewerage system, for which \$30,000 of bonds was recently voted.

New Orleans—Oil Wells.—R. B. Hewitt, R. J. Fanning, Israel Falk, A. F. Pierson and others have incorporated Southwestern Oil & Mining Co., with capital stock of \$350,000, for development of oil wells, etc.

New Orleans—Oil Wells, Mineral Lands, etc.—W. J. Hardee, Charles Lange, Louis A. Richards, John J. Foster and others have incorporated Maid of Orleans Oil & Chemical, Mining & Development Co., with capital stock of \$300,000, for development of oil, gas and mineral lands, refining oil, etc.

New Orleans—Mercantile.—Chartered: Jackson & Kilpatrick, Limited, for conducting a general exporting and importing commission business; capital stock \$20,000; incorporators, James Jackson, D. M. Kilpatrick and others.

New Orleans—Oil and Gas Lands, etc.—Delma J. Landry, M. Jordan, T. D. Evans, E. L. Chappins and others have incorporated the Sabine Oil & Mineral Co., Limited, for operation of oil, gas and mineral properties. Capital stock is \$500,000.

Whitecastle—Oil Wells.—Whitecastle Oil Co., Limited, has been incorporated, with J. T. Earle, Sr., president; Dr. A. E. Pierce, vice-president; W. F. Brown, treasurer, and R. B. Spofford, secretary; capital stock \$175,000.

## MARYLAND.

Baltimore—Ice Factory.—Maryland Vacuum Ice Co. has increased its capital stock from



\$200,000 to \$500,000, as lately reported, for the purpose of erecting an additional plant of 400 tons daily capacity adjoining present 100-ton plant, and for erection of other plants in Maryland and District of Columbia; Thomas E. Jenkins, secretary.

Baltimore—Hinge, etc., Factory.—Maryland Hinge Co., a full report of which was given last week, should be styled Baltimore Hinge Co.

Baltimore—Supply Company.—Chartered: Northeastern General Supply Co., with capital stock of \$10,000, by John L. Mueller, Geo. C. Kuhn, Louis A. Mueller and others.

Baltimore—Iron Works.—Dietrich Bros., iron workers, will erect two buildings, one four stories, 35x72 feet, and the other one story, 66x117 feet.

Baltimore—Publishing.—Maryland Publishing Co. has been chartered, with capital of \$1500, by James B. Stone, Chas. H. Curley, Jr., Jos. R. Stonebreaker and others.

Baltimore—Cigar Factory.—Chartered: Horwitz Cigar Co., with capital stock of \$40,000, by Charles Horwitz, Jonas Kaufman, Albert Welsgerber and others.

Baltimore—Foundry.—Baltimore Foundry Co., reported recently as incorporated, has purchased interests of J. P. B. Sadtler & Co., 813 S. Howard street, and will conduct general foundry business, making gray iron and brass castings, etc.; later on the manufacture of gas stoves will be added. Frank Popplein is president.

Baltimore—Paper-box Factory.—J. E. Smith Co. has been incorporated for the manufacture of paper boxes, etc., by James E. Smith, Walter Koppelman, Chas. D. Smyser and others; capital stock \$500.

Conowingo—Dam.—It is reported that the Susquehanna Paper Co. will construct a dam at Conowingo Falls and install hydraulic and electrical machinery for the development of 25,000 electric horse-power; cost of proposed improvements will, it is said, be \$2,500,000.

Hancock—Water-works and Gas Plant.—William T. Hamilton and associates have been granted franchise for construction of water-works and erection of acetylene-gas plant.

Hoffmanville—Paper Mills, Powder Mill, etc.—Rockdale Powder Co. has been chartered, with capital stock of \$175,000; company purchased about a year ago 1169 acres of land, including Hoffman Paper Mill, and is preparing to put the mill in operation to full capacity of ten tons per day; will also construct mills for manufacture of powder, dynamite and other explosives. Henry Washburn of York, Pa., is president; Spencer C. Gilbert of Harrisburg, Pa., vice-president; William L. Koller of Glen Rock, Pa., secretary and treasurer, and Milton S. Johnson of York, Pa., general manager.

Hyattsville—Water-works.—Frederick Minchall has contract for construction of Hyattsville's proposed water-works system.

Mt. Washington—Copper Mine.—Bear Hill copper-mine property of ninety-three acres has been sold to the Mt. Washington Copper Co.

Sparrow's Point—Steel Plant.—Persistent reports say that the Pennsylvania Railroad Co., or interests which it controls, has purchased control of the Maryland Steel Co. and that extensive enlargements will be made at the Sparrow's Point steel plant, especially in regard to rail manufacture. John P. Green, first vice-president of the Pennsylvania Railroad Co., Philadelphia, Pa., is credited with having stated that the railroad has not acquired control of the steel plant.

Washington, D. C.—Machine Shops.—Chartered: Washington Machine Co., for the manufacture and repair of electrical and steam appliances. Capital stock is \$10,000, and Lewis Hoffenmaier, president.

Washington, D. C.—Pumping Station.—Henry Brauns of Baltimore, Md., has completed plans and specifications for the proposed pumping station at Washington, previously reported. Building, equipment and machinery will cost approximately \$700,000.

Westminster—Flour Mill.—Geo. W. Albaugh & Co. will build a 50-barrel flour mill and corn mill.

#### MISSISSIPPI.

Ackerman—Coal, Copper, Oil, etc., Development.—G. R. Turner, E. R. Seward, A. J. Gaston, Russell Davis and others have incorporated Ackerman Mineral & Development Co., with capital stock of \$30,000, to explore for anthracite coal, copper, fire-clay, asphalt, oil and other mineral resources. Address Mr. Turner.

Biloxi—Water-works Extension.—Biloxi Artesian Water-Works Co. will extend its water-works service.

Sardis—Electric-light Plant.—Sardis Elec-

tric Light & Power Co. has been organized and applied for franchise for establishment of an electric-light plant.

#### MISSOURI.

Butler—Electric-light and Water Works.—The city has definitely decided upon the construction of water-works and an electric-light plant, plans and specifications for which have been prepared by Owen Ford, 710 Security Building, St. Louis, Mo. John L. Stanley is city clerk.\*

Chillicothe—Oil Wells.—Chillicothe Mineral Mining Co. is installing machinery for drilling for oil and gas.

Clinton—Flour Mill.—White Swan Mills will expend \$25,000 in increasing capacity from 800 to 1200 barrels per day. Contract for a part of machinery has been awarded.

Deer Brook—Flour Mill.—Deer Brook Milling & Mercantile Co. has been organized, with Jos. Huncock, secretary, for establishing a flour mill.

Dublin—Flour Mill.—L. C. Henderson of Carrytown, Mo., has purchased Dublin Roller Mills and will remodel to sift system; will also install corn crusher; contract for machinery not awarded.

Hannibal—Cement Plant.—Atlas Portland Cement Co., reported lately as having purchased 1000 acres of land near Hannibal and to erect plant, is of Northampton, Pa., where H. J. Seaman, superintendent, may be addressed for information.

Kansas City—Cabinet Factory.—Kansas City Cabinet Manufacturing Co., with capital of \$2000, has been incorporated by B. J. Schell, F. P. Schell and Chas. W. Garman.

Lexington—Corn Mill.—McGrew Milling Co. will install corn-mill machinery.

St. Louis—Construction.—Chartered: C. Skinner Building & Construction Co., with capital stock of \$2000, by C. Skinner, A. T. Skinner and A. F. Leslie.

St. Louis—Building Company.—Helen Building Co., with capital stock of \$5000, has been incorporated by John Helen and others.

St. Louis—Lumber Company.—Bradley Lumber Co. has been chartered, with capital stock of \$20,000, by A. C. Wheeler, S. H. Fullerton, Frank Goepel and others.

St. Louis—Shoe Factory.—La Puelle-Williams Shoe Co. has had plans prepared for a new factory, six stories, 120x160 feet.

St. Louis—Chartered: Klein Combination Concentrating & Classifying Co., with capital stock of \$100,000, by John Klein, Chas. D. McLure, Paul A. Fusz and others.

St. Louis—Lead Mines.—Chartered: Jennie May Lead Co., with capital stock of \$400,000, by H. J. Cantwell, D. P. Doak and T. A. Johnson.

#### NORTH CAROLINA.

Asheville—Electric-light Plant.—Asheville Electric Co. has, it is reported, asked for lighting franchise for Asheville and Weaverville.

Catawba—Flour Mill.—O. O. Murray & Co. will increase capacity of flour mill and add power plant.\*

Charlotte—Candy and Cracker Factory.—W. A. Andrews of Thomaston, Ga., will establish a candy and cracker factory at Charlotte.

Concord—Water-works and Sewerage.—The city has voted \$150,000 of bonds for installation of water-works and sewerage, previously reported; Quint E. Smith, city engineer.

Dallas—Flour Mill.—White & Jenkins will add additional machinery to roller mill and change bolting system; contracts not awarded.

Danbury—Real Estate, etc.—Vade Mecum Springs Co. has been incorporated, with capital stock of \$120,000, to deal in and improve real estate, mineral waters, etc., by J. C. Tice, W. A. Walker, J. D. Griffith, C. A. Jenkins and others.

Durham—Gas Plant.—Durham Gas Co., previously reported as having received franchise, has purchased site for its proposed plant.

Fayetteville—Electric-power Plant.—Fayetteville Ice Co. will contract with the city to furnish a building for a 50-arc electric-light dynamo for lighting purposes.

Gastonia—Mercantile.—Chartered: Kindley-Belk Bros., with capital stock of \$10,000, by W. K. Belk and others.

Greensboro—Flour Mill.—D. D. De Butts is interested in establishment of a 40-barrel flour mill and 100-bushel cornmeal mill.\*

Greensboro—Table and Mantel Company.—Chartered: Greensboro Table & Mantel Co., with capital stock of \$100,000, by J. A. Hodgkin, president; J. S. Cox, vice-president; W. T. Hamer, secretary and treasurer, and W. W. Mendenhall, general manager. Two

buildings, two stories each, main one 50x90 feet, and warehouse 40x90, will be erected and the Greensboro Table Co., recently reported to enlarge, will be merged into this company.\*

Jackson County—Copper Mines.—See item under Knoxville, Tenn.

Raleigh—Conduit System.—Southern Bell Telephone Co. has been granted franchise to construct conduits for underground telephone wires.

Raleigh—Street Improvements.—City will hold an election August 19 to decide issuance of \$50,000 of bonds for street improvements, having changed original amount of \$100,000 to \$50,000. Address "The Mayor."

Raleigh—Car Works.—It is reported that Western parties will take the plant formerly operated by the North Carolina Car Co. at Raleigh and improve and operate it; plant consists of planing mills, repair shops, foundry and car-wheel works.

Rocky Mount—Tobacco Company.—Chartered: Jas. C. Braswell Company, with capital stock of \$25,000, to conduct general leaf-tobacco business.

Sanford—Water-works Extension.—City has voted affirmatively the issuance of \$15,000 of bonds (recently reported) for extension of water-works system; A. L. McNeill, mayor.

Statesville—Cotton Mill.—Statesville Cotton Mills is erecting new building 50x120 feet, two stories, and will install 2000 spindles, etc.

Washington—Cotton-oil Mill.—Havens Cotton Oil Mill Co. has been incorporated, with capital stock of \$30,000.

Weaverville—Electric-light Plant.—See item under Asheville, N. C.

Westfield—Flour Mill.—It is reported that Nuel Inman will change his mill from burrs to rolls and install a 40-barrel plant.

Weldon—Broom Factory.—B. A. Pope, W. B. Green and others will establish a broom factory, operating as the Weldon Broom Co.

Whittier—Lumber Company.—Chartered: W. T. Mason Lumber Co., with capital stock of \$75,000, by W. T. Mason and E. H. Hall of Indiana, to conduct general timber and saw-mill business.

Wilmington—Furniture Company.—I. E. Sneed, E. H. Sneed, A. C. Sneed and C. D. Phares are incorporators of Sneed Furniture Co., recently reported incorporated, with capital stock of \$7000.

Windsor—Peanut Factory, etc.—R. C. Bazemore, Geo. L. Madre, Francis D. Winston and others have incorporated Windsor Cotton & Peanut Co., with capital stock of \$25,000, for cleaning peanuts, making peanut meal, etc.

#### SOUTH CAROLINA.

Charleston—Drug Company.—Geer Drug Co. has increased its capital stock to \$100,000.

Johnston—Flour Mill.—J. E. Edison will build a 100-barrel flour mill.

Timmonsville—Tobacco Factory.—Enterprise Steam Plant has been organized, with capital stock of \$15,000, for establishing a steam-drying tobacco factory. J. A. Call is president, and Duncan McKenzie, secretary-treasurer.

Union—Ice Factory, Sewerage System, etc. Buffalo Cotton Mills (now building) will erect ice factory, construct sewerage system, macadamize streets, etc. T. C. Duncan is president.

Whitmires—Cotton-oil Company.—Whitmire Cotton Oil Co. has incorporated with William Coleman president and treasurer.

#### TENNESSEE.

Briceville—Coal Mines.—Sloss-Sheffield Iron & Steel Co. of Birmingham, Ala.; Edwin D. Martin of Mobile, Monroe Rindskopf of Memphis, Tenn., and James B. Parks of Chattanooga have formed a corporation, with capital stock of \$250,000, for development of coal mines near Briceville. Company is also reported to open up new mines near Coal Creek and Jellico, and as negotiating for purchase of Clinton Zinc Works. E. J. Edwards, who represents the Sloss Company, will be general manager and superintendent.

Cleveland—Telephone System.—Mutual Telephone Co. will be organized for construction of telephone system. Names of interested parties will be announced later.

Columbia—Oil Wells.—Columbia Oil Co. incorporated, with capital stock of \$12,000.

Elizabethton—Line and Twine Factory.—Tennessee Line & Twine Co. will rebuild its factory recently damaged by storm; two-story building, 150 feet long, will be added to the former size, costing \$3000.

Gainesboro—Grist Mill.—D. Fowler will erect grist mill.

Kettle Mills—Flour Mill.—Kettle Milling Co. has rebuilt its corn bins recently burned.

Knoxville—Lead and Zinc Mines.—Northern parties, who include C. D. W. Colley, John Lord and Albert J. Lord, have, it is reported, optioned properties in Claiborne and Hancock counties, Tenn., and will install improved machinery for developing same; 100-ton concentrator is also mentioned, involving expenditure of \$40,000. In addition to above it is reported that old copper beds in Jackson county, N. C., will be reopened by same parties. The party was recently registered at Arcade Hotel, Knoxville.

Knoxville—Pottery and Fire-brick Works. C. R. Reifsnider of St. Louis, Mo., is investigating with a view of establishing pottery and fire-brick works at Knoxville.

Knoxville—Sewers.—The city has commenced work on 4740 feet of sewer construction that will cost about \$6000. T. J. Moreland, chief engineer, is in charge.

Knoxville—Electric-power Plant.—Col. John Bogart, consulting engineer; H. O. Reed, secretary-treasurer, and W. C. Crozer, resident engineer of Knoxville Power Co. (a corporation with capital stock of \$5,000,000), are investigating the Little Tennessee river as a site for proposed dam to furnish water-power for electric plant to supply Knoxville and other towns with light and power. It was reported several months ago that the company had petitioned Congress for authority to dam the Tennessee river at Knoxville, but this failed; hence the Little Tennessee investigations.

Lawrenceburg—Steel Bridge.—Lawrence county will construct steel highway bridge. F. M. Cannon, chairman of committee, can be addressed.\*

Lebanon—Coal Mines.—A. W. Hooker, D. E. Mitchell, D. W. Braden, J. A. Lester and others have organized Obey River Coal Co. for development of 1500 acres of coal lands near Monterey.

Marion—Oil Wells.—Mr. Pedigo of Roanoke, Va., and others will, it is said, bore for oil on property of Elijah Faris and J. C. Gollehon, near Marion.

Myland—Spoke Factory.—J. L. Horn contemplates installing spoke machinery.\*

Nashville—Publishing.—Chartered: Post Publishing Co., with capital stock of \$100,000, by Robert M. Dudley, T. Garland Tusley, John A. Pitts and others.

Rockwood—Coke Ovens, etc.—J. C. Monday & Co. of Chattanooga have contract to build seventy-five new coke ovens and a large amount of stone work for Roane Iron Co. at Rockwood; bid was about \$12,000.

Sevier—Timberland Development.—J. F. Shea of Williamsport, Pa., representing Eastern capitalists, has purchased 20,000 acres of timber lands in Sevier county, and saw-mills will be erected for developing the property.

Shelbyville—Flour and Corn Mill.—James Yoes of Shelbyville and Eli Hopkins of Farmington have purchased the Lane flouring and corn mill at Shelbyville; will remodel and improve same at once.

Waverly—Water-works and Electric-light Plant.—A. E. Justice and J. P. Cowan have incorporated Waverly Water Supply Co., as recently reported, purpose being to supply town with deep-well water; gravity pressure will be used; same parties will organize company for establishment of electric-light plant. Address A. E. Justice.\*

West Nashville—Flour Mill.—Edgar M. Hayes will increase capacity of flour mill.

West Nashville—Saw-mill.—J. B. Ransom & Co. have rebuilt and put in operation their saw-mill reported recently as burned.

#### TEXAS.

Austin—Oil Wells.—Huntley Oil & Refining Co. has been incorporated, with capital stock of \$2,500,000, to prospect for oil in twenty-five Texas counties. Directors include Chas. A. Towne of Minnesota and Gov. Benton McMillan of Memphis, Tenn.

Bay City—Bridges.—Town will vote July 2 on issuance of \$40,000 of bonds for bridge construction. Address "Town Clerk."

Beaumont—Telephone Company.—Beaumont Telephone Co. has been incorporated, with capital stock of \$60,000, by W. H. Aldridge, S. H. Van Wormer and J. K. Duffy.

Beaumont—Oil Wells.—Chartered: Ground Floor Oil Co., with capital stock of \$100,000, by S. E. Moss, J. C. Cleveland of Cleburne, Alba Heywood of Beaumont and others.

Beaumont—Electric-light Plant and Power-house.—Beaumont Street Railway Co., reported recently as having awarded contract for construction of its proposed water-works system, has also purchased site for power-house and electric plant, and will soon begin work on same.

Beaumont—Oil Wells.—Beaumont & Trinity Oil Co. has been incorporated, with capital



tal stock of \$500,000, by F. A. and J. P. Carter of Fort Worth, H. G. Lyon of St. Louis, Mo.; Charles Martin of Beaumont and others.

Beaumont—Cotton Mill.—Dr. B. F. Calhoun is in correspondence with a Raleigh (N. C.) party, who contemplates establishing a cotton factory in Beaumont.

Beaumont—Oil-pipe Lines, etc.—Missouri, Kansas & Texas Oil Co. has closed the contracts referred to last week. Contracts call for ten 60,000-barrel storage tanks, 100 railroad tank cars, and for 10-inch pipe line to be laid from Beaumont to Port Arthur and Sabine Pass. Theo. Stegener is president.

Beaumont—Laundry.—Ineeda Laundry Co. has been chartered, with capital stock of \$20,000, by Horace and James Trimble and S. G. Burnett.

Campbell—Creamery.—Campbell Creamery Co. has been incorporated, with capital stock of \$7500, by H. H. Tilson, J. D. Roach and J. E. Ralph.

Chapel Hill—Creamery.—A Mr. Welch of Chicago will build a creamery at Chapel Hill with capacity of 1000 pounds of butter and 1200 pounds of cheese per day; cold-storage plant will also be installed. S. P. Ketchum can be addressed.

Dallas—Plow Factory.—Southern Rock Island Plow Co. is preparing to replace burned structure with a seven-story building.

Elgin—Oil Wells.—Chartered: Brenham-Elgin Company, with capital stock of \$10,000, by R. Tomo and M. T. Smith of Elgin, F. W. Wood of Brenham and others.

El Paso—Smelter.—Pheps-Dodge Mining Co., recently reported to establish a smelter, has secured site for proposed plant.

Frost—Cotton-oil Mill.—Farmers & Merchants' Cotton Oil Co. has been chartered, with capital stock of \$35,000, by E. T. Gillen, G. J. Hefflin and L. A. Morgan.

Galveston—Oil Wells.—Gulf & Interstate Oil Co. has been incorporated, with capital stock of \$100,000, by J. W. Dickson, J. J. Davis, A. J. Compton and James S. Waters.

Gladys City—Oil-pipe Line.—National Oil & Pipe Line Co., R. L. Henry, president, has awarded contract to Sturm & Elliott of Beaumont for construction of pipe line from well in Gladys City to wharves at Port Arthur; also seven tanks will be erected with capacity of 37,500 barrels each.

Henderson—Cotton Gin, etc.—Henderson Cotton Oil & Gin Co. has been incorporated, with capital stock of \$40,000, to manufacture cottonseed oil, gin cotton, etc., by H. L. Griffin, A. Wettermark, J. E. Hightower and others.

Honey Grove—Water Company.—Chartered: Holt's Heights Water Co., with capital stock of \$100,000, by J. T. Holt, J. B. McKee, W. F. Underwood and others.

Houston—Oil Mill, etc.—Merchants & Planters' Oil Co., T. W. House, president, will begin work at once rebuilding its cottonseed-oil mill burned last September; refinery and barrel factory will be completed for this season's seed, but other buildings not until later; cost of reconstruction about \$200,000.

Marshall—Pipe Line, etc.—Chartered: Dixie Oil & Pipe Line Co., with capital stock of \$120,000, by Charles M. Racquet, Charles Cobb, Jr., E. J. Fry and others.

McKinney—Ice and Coal Company.—McKinney Ice & Coal Co., with capital stock of \$20,000, has been incorporated by L. A. Scott, E. W. Morton, Jr., and William Ware.

Mineral Wells—Copper Mines.—Brazos River & Croton Creek Mining & Townsite Co., reported recently as incorporated by G. W. Eddleman, J. H. Ethel, J. D. Matthews, L. A. Wade and others, has installed machinery for and will begin development of copper ore in Stonewall county.

Mineral Wells—Water Company.—Crazy Well Water Co., with capital stock of \$30,000, has been incorporated by R. E. Hendry, M. W. Hendry and J. T. Harris.

Nacogdoches—Oil Wells.—Nacogdoches Oil & Mineral Co. has been incorporated, with E. M. Dotson, president; John M. Weeks, vice-president, and J. H. Summers, secretary.

Palestine—Street Improvements.—City will hold an election in July to vote on issuing \$40,000 of bonds for street paving, etc. Address "The Mayor."

Pecos—Oil Wells.—Consolidated Oil Co. has been incorporated, with J. E. Bowen, president; James Rooney of Fort Stockton, vice-president; R. D. Gage, secretary.

Pecos—Oil Company.—Chartered: Amalgamated Oil Co., with James Rooney, president; Ed. L. Collins, vice-president, and Finlay Holmes, secretary; capital stock \$10,000.

Port Arthur—Oil Wells.—Savanna &

Texas Oil Co. has been chartered, with capital stock of \$400,000, by M. C. Ludke, A. W. Simms, W. L. Westbrook, O. A. Manning and others of Savanna, Ill.; F. J. Miller of Beaumont and others.

Richmond—Syrup Mill.—F. I. Booth will build syrup mill, as lately reported; capacity 8000 gallons of syrup per day.

Rosenberg—Oil Wells, Pipe Line, etc.—Chartered: Damon Mound Oil, Pipe Line & Mining Co., with capital stock of \$100,000, by W. C. Munn of Welmar, S. C. Brasher of Houston, W. H. Misher of Rosenberg and others.

Round Rock—Ginnery.—Chartered: Swedish Ginning Co., with capital stock of \$20,000, by J. B. Badger, W. F. Payne and W. T. McCutcheon.

Texarkana—Cotton Compress.—J. C. Taylor, Julius Lesser, W. A. Arthur and T. C. McFadden have incorporated Texarkana Compress Co., with capital stock of \$50,000.

Texarkana—Electric-light Plant.—Kansas City (Mo.) parties, headed by R. M. Shaw, have been granted franchise for erection of electric-light plant in Texarkana.

#### VIRGINIA.

Cedar Springs—Flour Mill.—Keesling & Son contemplate replacing present equipment with 25-barrel sieve outfit, to be operated by water-power, which will necessitate construction of dam, etc.

Chilhowie—Brick Works.—West Virginia Vitriol Brick Co. of Chattanooga, Tenn., is credited with having purchased brick plant at Chilhowie of Virginia Paving Co. and to operate it.

Culpeper—Flour Mill.—Marion Jeffries will install a 100-barrel flour mill and 400-bushel corn mill.

Drakes Branch—Flour Mill.—Jackson & Co. have established a roller flour mill.

Drakes Branch—Tobacco Factory.—W. C. Scott will install steam plant for handling tobacco.

Fredericksburg—Telephone Line.—Northern Neck Telephone Co. will extend its line to Kinsale and other points.

Fredericksburg—Electric-light Plant.—Mrs. E. C. L. Ficklen, who purchased Rappahannock Electric Light and Power Plant, as recently reported, contemplates making changes and installing a 60 or 75-kilowatt three-phase machine.

Hampton—Novelty Company.—Old Point Novelty Co. has chartered, with capital of \$2000, for dealing in novelties. Sidney J. Dudley is president, and John B. Kimberley, treasurer.

Money Point (P. O., Norfolk)—Creosoting Plant.—E. Christian has purchased Old Dominion Creosoting Works and will improve and operate under name of E. Christian & Co.; company has capital stock of \$100,000.

Money Point (Norfolk)—Lumber Mill.—Roanoke Railroad & Lumber Co. is preparing to erect a \$50,000 lumber mill.

Morven—Flour Mill.—Rand Bros. will install full sifter system in their flour mill.

Narrows—Flour Mill.—H. W. Hale will build 50-barrel flour mill, and has not awarded contract for machinery.

Petersburg—Knitting Mill.—Petersburg Hosiery Co. has let contract for additional building, two stories, 40x100 feet, to cost over \$7000, and will install in same new machinery to double capacity.

Richmond—Electric-power Plant.—Richmond Locomotive Works will erect an additional building to cost \$5000 and install \$12,000 worth of machinery for power plant.

Richmond—Manufacture.—W. W. Silvester is interested in the establishment of a manufacturing plant.

Virginia—Stockyards and Abattoir.—Butchers' Association, John R. Kelly, president, 1111 Seventeenth street N. W., Washington, D. C., has organized \$75,000 company for establishment of stockyards and an abattoir in Virginia opposite Washington. Charter will be applied for.

#### WEST VIRGINIA.

Charleston—Wagon Company.—Chartered: Mechen Wagon Co., with capital stock of \$125,000, for manufacture of wagons, by Clifford L. Beane, Walter U. Mechen, Thomas L. Wagner and others, all of Orleans, N. Y.

Charleston—Drug Company.—Chartered: Hubbard-Williams Company, for dealing in drugs, etc., by R. G. Hubbard and others; authorized capital \$50,000.

Fairmont—Coal-mining Combination.—The Fairmont Coal Co., capital stock \$12,000,000, has been organized and placed bonds to the amount of \$4,000,000. J. O. Watson, J. E. Watson, S. L. Watson, C. W. Watson and A. B. Fleming are interested. The new company combines thirty-six plants in the

Fairmont coal district, also a perpetual lease on 25,000 acres of coal lands. Annual output will be 6,000,000 tons of coal.

Morgantown—Glass Factory.—Large window-glass factory will, it is said, be established. Address "Secretary Board of Trade."

New Martinsville—Electric-light Plant.—Ohio Valley Development Co., Henry Thompson, president, reported recently as incorporated, will apply for franchise for erection of electric-light plant.

Wellsburg—Coal and Manufacturing.—Chartered: Ohio Valley Coal & Manufacturing Co., for developing coal lands, manufacturing coke, etc., by Anthony Jones Morgan of Pittsburgh, Pa.; T. P. Williams of New Castle, Pa., Samuel H. Lawson of Crafton, Pa., and others. Capital stock is \$10,000, with privilege of increasing to \$100,000.

Wheeling—Tin-can Factory.—Wheeling Can Co., recently reported incorporated, has had plans made by Glessey & Faris for two-story building 60x150 feet, to be equipped with latest machinery for manufacture of cans.

#### BURNED.

Eufaula, Ala.—C. E. Coffin's grist mill, gin and saw-mill; loss \$3000.

Jackson, Miss.—Jackson water-works plant.

Jacksonville, Fla.—Jacksonville Knitting Mills damaged to extent of \$10,000.

Lewisburg, Tenn.—Hardison & Arthur's machine shops; estimated loss \$8000.

McComb City, Miss.—Two kilns at White's brick-yards; loss \$1000.

#### BUILDING NOTES.

Aberdeen, Miss.—Jail.—"Supervisors of Monroe County" will issue \$15,000 of bonds on August 5 for erection of new county jail; board also advertises for contractor to build fireproof record vault as annex to courthouse.

Atlanta, Ga.—Dwellings.—Judge J. N. Bateman will erect a \$3500 cottage. C. J. Martin will build a two-story frame dwelling to cost \$2200 and another to cost \$3050.

Atlanta, Ga.—Club Building.—Atlanta Athletic Club has purchased site at \$12,000, and will erect an \$18,000 building.

Augusta, Ga.—Building.—W. J. Craig and T. W. Alexander are having plans prepared by Louis F. Goodrich for erection of brick store and tenement building.

Baltimore, Md.—Dwelling.—Dr. Irvin Ebaugh will erect a \$3300 dwelling at Pennsylvania avenue and Wilson street.

Baltimore, Md.—Hotel.—Charles L. Forbes will erect a four-story hotel building on McMeen street to cost \$20,000.

Baltimore, Md.—Residence.—N. Winslow Williams has awarded contract to C. J. M. Williamson for erection of four-story brick addition to residence to cost \$9900.

Baltimore, Md.—Church.—Thomas P. Johns has contract at about \$5500 for erection of St. James' First African P. E. Church after plans by Ghequeler & May.

Baltimore, Md.—Buildings.—George Bunneke & Sons have contract for erection of building for Crown Cork & Seal Co., previously reported; cost \$35,000. John Hiltz & Son have contract to erect residence for Col. Alfred E. Booth, recently reported. Provident Savings Bank will erect branch bank building. J. H. Kite has contract to build new Presbyterian church at White Hall at \$3000.

Baltimore, Md.—Warehouses.—Howard & Myers have awarded contract to John Cowan for erection of three-story warehouse at 117 East Baltimore street. Plans were by E. H. Glidden.

Birmingham, Ala.—Church.—Third Presbyterian Congregation has purchased site for erection of its proposed church.

Brookhaven, Miss.—Schools.—The town will issue \$15,000 of bonds for enlarging school buildings. Address "Town Clerk."

Chattanooga, Tenn.—Dwellings.—J. A. Mitchell has awarded contract for erection of tenement-houses to cost \$5000.

Chattanooga, Tenn.—College.—Grant University has awarded contract to Adams & Schneider at \$23,000 for erection of new medical college building, three stories, brick and stone, equipped with steam-heating and electric-lighting apparatus.

Crudup, Ala.—Dwellings.—Stowers Mining Co. has let contract for erection of forty houses.

Dahlonega, Ga.—Dormitory.—H. D. Gurley, chairman building committee, will open bids June 29 for erection of three-story wooden dormitory (twenty-four rooms) for North

Georgia Agricultural College. Plans and specifications at store of Mr. Gurley.

Eaton, Ga.—Dwellings.—Middle Georgia Cotton Mills will build sixteen tenement-houses.

Fairfield, Texas—School.—Trustees of Fairfield School District have awarded contract for erection of \$4000 school building.

Fort Caswell, N. C.—Buildings.—W. R. Bonsel & Co. of Hamlet have contract for erection of government buildings at Fort Caswell; contract price about \$45,000.

Gaffney, S. C.—Theater.—Chartered: Star Theater Co., with capital stock of \$15,000, by L. Baker, J. A. Willis, A. N. Wood and others.

Gaffney, S. C.—Theater.—L. Baker, W. C. Carpenter and A. N. Wood will incorporate the Star Theater Co., with capital stock of \$15,000, and will have plans made at once for erection of theater.

Galveston, Texas—Building.—N. J. Clayton, architect, will receive proposals until June 27 for erection and completion of St. Mary's Catholic Orphan Asylum, according to plans and specifications. Each bid must be accompanied by certified check for \$1000. Usual rights reserved.

Galveston, Texas—Opera-house.—B. Adoue and I. H. Kemper have purchased Galveston Opera House, as reported recently, as trustees for former bondholders; will rebuild house after plans by McElfrick & Son of New York city, to cost \$30,000.

Georgetown, Ky.—School.—J. T. Brooks has contract at \$5000 for the woodwork on new school building.

Grafton, W. Va.—Church.—Architect Giffin is preparing plans for remodeling the Baptist church; cost of improvements about \$12,000.

Healing Springs, N. C.—Hotel.—Mr. Lowry of Buncombe county and the Messrs. Daniel will erect small hotel at Healing Springs.

Hearne, Texas—Depot.—International & Great Northern Railroad will build stone depot at Hearne; D. J. Price, G. P., Palestine, Texas.

Hebron, S. C.—Church.—Contract will be awarded in about three weeks for erection of Hebron Church. Plans and specifications may be seen at John Striplings. Address M. L. Banks, Jr.

Hot Springs, Ark.—Postoffice.—J. K. Taylor, supervising architect, Treasury Department, Washington, D. C., will open bids July 11 for construction (except heating apparatus, electric wiring and conduits) of the United States postoffice at Hot Springs, in accordance with drawings and specifications, copies of which may be had at above office or at office of postmaster at Hot Springs.

Houston, Texas—Residence.—Contractor Heidelberg has received contract at \$12,000 for erection of Ed. Kiam's proposed residence.

Jacksonville, Fla.—Dwellings.—A. E. McClure is preparing plans for two buildings for the George O. Holmes estate. R. N. Wilkie will erect a \$5500 frame dwelling. Major R. McLaughlin will build \$3500 dwelling. Dr. C. C. Betts will build dwelling. William Byrne is having plans made for \$3500 residence.

Jacksonville, Fla.—School.—Wilson & Edwards of Columbia, S. C., have prepared plans for school building to be erected at Jacksonville.

Kansas City, Mo.—Office Building.—W. M. Reid is having plans made by Walter C. Root for erecting two additional stories to the Postal Building.

Knoxville, Tenn.—Office Building.—Bauermann Bros. are preparing plans for proposed eight-story office building of Dr. C. Deaderick to be erected at cost of \$75,000; plans will be completed and ready for awarding contracts July 15.

Montgomery, Ala.—Building.—Southern Bell Telephone Co. has accepted plans for proposed new building, three stories, brick, stone trimmings.

New Orleans, La.—Office Building.—Dr. C. Edmund Kells, Jr., has purchased site at \$31,000 and will build a six-story office building.

Paducah, Ky.—Building.—Home of Friendless has let contract to B. T. Davis at \$6556 for erection of proposed brick building, with furnace heat, electric lights, etc.

Parkersburg, W. Va.—Office Building.—Caldwell & Drake have contract for erection of \$50,000 office building for Citizens' Guaranty & Trust Co.

Okolona, Miss.—Depot.—Mobile & Ohio Railroad Co. will erect a \$5000 freight and passenger depot; erection of building will be superintended by W. G. Mabry, architect and builder.

Orange, Texas—Building.—N. A. Dawson



of Austin has contract for erecting the J. W. Link building, which will be two stories, 80x140 feet, and cost \$25,000.

Richmond, Va.—Business Building.—Estate of James W. Allison has had plans made by M. J. Dimmock for erection of a four-story brick, stone and iron building to cost \$18,000 and be occupied by E. B. Taylor Co.

Richmond, Va.—Hospital.—Newton E. An-carrow has contract for erection of Charlotte Williams Hospital, previously reported. A. W. Fuller of Albany, N. Y., prepared plans.

Richmond, Va.—Hotel.—Hodges & Leach of Baltimore, Md., are making plans for a \$150,000 hotel to be erected in Richmond.

San Antonio, Texas.—Store Building.—Joske Bros. are having plans made by Coughlin & Ayres for reconstruction of their store building.

Selma, N. C.—Warehouse.—Company reported last week as organized, with J. H. Parker, president, for erection of two tobacco warehouses, will be known as Selma Improvement Co.

Sparks, Ga.—School.—City has voted affirmatively the issue of \$5000 of bonds for erection of brick and stone school building previously mentioned. Address "The Mayor."

Tuscaloosa, Ala.—Opera-house.—W. Chamberlin & Co. of Birmingham, Ala., have prepared plans for proposed opera-house and club building for I. O. of Elks; building will be three stories, brick, 130x60 feet, equipped with heating apparatus, swimming pool and gymnasium; cost about \$35,000.

Union, S. C.—Bank Building.—New banking company organizing will erect a building. Address B. F. Arthur.

Union City, Tenn.—School.—Britton B. Davis of Paducah, Ky., will prepare plans and specifications for enlargement of public-school building at Union City; cost \$10,000.

Valdosta, Ga.—Buildings.—Hill Avenue Investment Co., reported recently as incorporated, will improve the Central Hotel Block by erection of business buildings.

Vicksburg, Miss.—City Hall.—Bids will be opened July 1 for erection of city building after plans and specifications on file at offices of J. Riely Gordon, Dallas, Texas, and Shreveport, La.; E. S. Hall, No. 918 at 153 La Salle street, Chicago; J. W. Thompson, Wainwright Building, St. Louis, and of "City Clerk," Vicksburg.

Waco, Texas.—Schools.—The city will hold an election July 7 to determine issuance of \$60,000 of bonds for erection of new school buildings and remodeling old ones. Address "The Mayor."

Washington, D. C.—Buildings.—Eugene E. Gaddis has purchased site at \$85,000 and will erect a number of two-story brick and stone dwellings. Dr. T. Morris Murray is having plans made by Chase & Ames of Boston for erection of a large residence. R. W. Walker and W. H. Walker are building a row of five three-story houses after plans by F. B. Pyle. Tolman Steam Laundry is having plans made by James G. Hill for erection of a new building. Woodward & Lothrop will erect a \$500,000 building, plans for which are being prepared by Henry Ives Cobb.

Waverly, Va.—Bank Building.—Bank of Waverly will erect bank building to cost \$5000.

## RAILROAD CONSTRUCTION

### Railways.

Abbeville, La.—The work of grading the section of the Southern Pacific Railroad between Abbeville and Gueydan has begun and rails and other material for the extension are now being received. It is expected to complete the line by September 1. It will be about twenty-five miles in length. S. A. Robertson & Co. are the contractors.

Alesia, Md.—The Rockdale Powder Co., it is stated, will build a railroad from its works to a connection with the Western Maryland Railroad near Alesia. The branch will be standard gauge. Henry Washers of York is president, and Spencer C. Gilbert, vice-president of the company.

Alexandria, La.—Arrangements are being made to connect the Shreveport & Red River Valley Railroad with the Texas & Pacific Railroad at Alexandria, and work is in progress upon the bridge over the Red river. Rails have been secured for the extension under construction between Alexandria and Mansura. P. McIlvried of Shreveport is general manager of the company.

Amarillo, Texas.—It is reported that the last contracts for extending the Choctaw, Oklahoma & Gulf Railroad from Weatherford, Okla., to Amarillo have been let and that the work is to be completed as soon as

possible. J. W. Molitor at Little Rock, Ark., is chief engineer.

Augusta, Ga.—It is announced that work is to begin upon the electric railroad between Augusta and Aiken, S. C., on June 25. John Blair McAfee of Philadelphia is general contractor, and James U. Jackson of Augusta, president of the company.

Beattyville, Ky.—An official of the Louisville & Atlantic Railway Co. states that the proposed extension will be about twenty-seven miles in length and connecting two lines which the company owns. The track will be laid with 60-pound steel rail, and contracts for grading will be let immediately. The company will require considerable rolling stock. A. T. Sabin at Versailles, Ky., chief engineer, may be addressed.

Beaumont, Texas.—C. F. Price of Lima, Ohio, is reported as interested in a proposed electric railway between Beaumont and Port Arthur, a distance of thirty-five miles.

Bristol, Va.—Surveys are now being made, it is reported, for a railroad line to Bristol through the western portion of the State by way of Rocky Mount, Smithville and Damascus. The company is called the Mount Rogers & Eastern Railroad Co., and it is understood will form a connection with some road terminating at tidewater on Chesapeake bay. George D. Inman is engineer.

Brunswick, Ga.—It is reported that the Brunswick & Birmingham railroad has been completed to a point near the Seaboard Air Line, and it is expected to begin train service between Brunswick and a connection with the Seaboard about July 1. E. C. Machen, 277 Broadway, New York, is president of the company.

Chester, S. C.—It is stated that the Seaboard Air Line has decided to replace several wooden bridges in the vicinity of Chester with steel structures, also to reballast a section of the road between Chester and Atlanta. James M. Barr at Norfolk is general manager.

Cuthbert, Ga.—President John M. Egan of the Central of Georgia Railway Co. confirms the report that surveys are being made between Cuthbert and Lumpkin, but no decision has been reached as to the construction of new mileage.

Dallas, Texas.—It is expected that the improvements to be made to the section of the Missouri, Kansas & Texas system in Texas during the present year include the relaying of fifty miles of track with heavier rails and the rebalasting of the system between Hillsboro and Dallas. A. A. Allen at Dallas is vice-president of the company.

Dallas, Texas.—G. Van Glukie is reported as interested in a scheme to build a railroad from Dallas to Denison, Paris and Greenville. Mr. Van Glukie was formerly president of the Dallas Electric Railway system.

Dallas, Texas.—The report that an Ohio syndicate has purchased the Dallas Consolidated Street Railway and the North Dallas Circuit Railway is confirmed. It is understood the syndicate will build the proposed line between Dallas and Fort Worth. Pierre S. Dupont of Lorain, Ohio, represents the purchasers.

Davis, W. Va.—A correspondent of the Manufacturers' Record writes that parties at Thomas, W. Va., are interested in the proposed railroad between Thomas and Davis, recently referred to in these columns.

Dothan, Ala.—C. R. Garrard, chief engineer of the Dothan, Hartford & Florida Railway Co., informs the Manufacturers' Record that it is expected to receive bids for construction about July 1. The road would be 117 miles in length, extending from Dothan to St. Joseph's bay, Fla.

Dyersburg, Tenn.—It is reported that the railroad being constructed from Dyersburg to a point on the Mississippi river will be completed within a few months, and that it will be operated in the interest of the Illinois Central. David Sloan at Chicago is chief engineer of the Central.

Enterprise, Ala.—T. B. L. Edwards, secretary of the Enterprise Southern Railroad Co., informs the Manufacturers' Record that preliminary surveys have been completed for the line, which will be about 125 miles in length. The first section to be built will be twenty-five miles long. Edward M. Johnson is president, and W. B. Finney, treasurer of the company. It is proposed to complete it between Enterprise and Geneva, Ala. At Geneva connection will be made with the Louisville & Nashville system.

Florence, Ala.—Arrangements are being completed to consolidate the Tennessee & Northwestern and the Florence & Northwestern railway companies in order to construct the proposed line from Florence to a point in Tennessee. As already stated in the Manufacturers' Record, the Alabama, Tennessee & Northwestern Railway Co. is

promoting the line, and it is expected to begin construction within the next sixty days. J. L. Bell, 29 Broadway, New York city, is president of the company.

Fort Worth, Texas.—Right of way is being secured in Fort Worth for the terminals of the St. Louis & San Francisco Railroad, which is to be extended to the city. B. F. Yoakum at St. Louis, Mo., is president of the railroad company.

Fredericksburg, Va.—The Eastern Virginia Construction Co. has been formed to build the proposed railroad between Fredericksburg and Washington, Va., by way of Culpeper and Sperryville. The railroad is to be termed the Fredericksburg & Rappahannock Railroad. The estimated distance is fifty-five miles. A. C. Willis has been elected president of the construction company; W. E. Coons, secretary, and C. J. Rixey, treasurer. Mr. Willis may be addressed at Culpeper.

Hagerstown, Md.—The Carlisle & Mount Holly Trolley Co. has been organized at Carlisle, Pa., and, it is stated, will construct an electrical system between Carlisle and Hagerstown.

Laurel, Miss.—Work has begun upon the road between Laurel and Waynesboro, which is being built by the Laurel & Waynesboro Railroad Co. The line will be thirty-five miles in length. Among those interested is W. W. Austin, who may be addressed at Rockton, Ill.

Monroe, N. C.—The Charlotte, Columbia & Monroe Railroad Co. has increased its capital stock and it is understood will soon complete the line it is promoting from McBee, S. C., to a point near Monroe, N. C., a distance of thirty-nine miles. The road will form a portion of the Seaboard Air Line when completed.

Montgomery, Ala.—John W. Watts, president of the Montgomery Northern Railway Co., furnishes additional information to the Manufacturers' Record to the effect that bonds will be issued to finance the project and that surveys have been made of sixty miles of the route. The total length of the road will be 100 miles, with Montgomery and Anniston the terminal points.

Monticello, Ky.—It is stated that arrangements are being made to build a narrow-gauge railroad to reach timber lands in the vicinity of Rock creek. Parties interested in the property will build the road.

Navasota, Texas.—The Gulf, Colorado & Santa Fe Company is reported as making a survey between Navasota and Madisonville, a distance of forty-five miles. L. J. Polk at Galveston is general manager of the company.

New Orleans, La.—The city engineer has prepared a report relative to the proposed belt line in the suburbs. Surveys have been completed, and the matter is now being considered by the city council.

Norfolk, Va.—The Chesapeake Transit Co., which is interested in a proposed railroad from Norfolk to Cape Henry, on the Atlantic coast, has given a mortgage to the Land, Title & Trust Co. of Philadelphia to secure an issue of \$500,000 in 5 per cent. bonds. It is reported that the road is to be built in the interest of the Pennsylvania Railroad to avoid the present car ferry between Norfolk and Cape Charles. Thomas H. Wilcox is president of the Chesapeake Transit Co.

Onelda, Tenn.—It is reported that surveys have been completed for a railroad from Buckeye to Onelda. Connection will be made with the Louisville & Nashville at Onelda. A Michigan syndicate is reported as interested.

Rosenberg, Texas.—The Rosenberg, Damon Mound & Gulf Railroad Co. has elected S. C. Brasher of Houston, president; L. H. Ayler of Orchard, vice-president, and R. T. Mulcahy of Rosenberg, general manager. It is reported that the company expects to begin grading this line by July 1.

Savannah, Ga.—Edward A. Richards has asked for a franchise to construct an electric street railroad in the city and suburbs. It is stated that Mr. Richards represents a New York syndicate.

Selma, Ala.—It is announced that James Sullivan has secured a contract to construct twenty-seven miles of extension of the Birmingham, Selma & New Orleans Railroad from its present terminus, Martin's Station. F. M. Abbott at Selma is president of the company.

Shelbyville, Tenn.—It is reported that the plan to build a railroad between Shelbyville and Huntsville, Ala., has been revived and that a company may be formed in the near future to take up the enterprise.

Southport, N. C.—The promoters of the Southport, Wilmington & Durham Railroad have recently made an examination of the

route between Southport and Wilmington. Among those reported as interested are J. B. Kimes and H. G. Williams of Philadelphia and R. W. Hicks of Wilmington.

Terrell, Texas.—E. H. R. Green, president of the Texas Midland Railroad Co., advises the Manufacturers' Record that no definite arrangements have been made about the proposed extension of the Texas Midland to San Antonio.

Tracy City, Tenn.—J. J. Northcutt of Chattanooga, one of the promoters of the electric railroad between Tracy City and Beersheba Springs, informs the Manufacturers' Record that it will be about twenty-two miles in length and it is expected to make surveys in the near future. After the first section is built a further extension of nineteen miles is contemplated.

Velasco, Texas.—It is reported that H. Kempner has secured a controlling interest in the Velasco Terminal Railroad, recently sold by order of the court. As already stated in the Manufacturers' Record, it is expected to extend the line to Damon Mound from Chenango Junction, its present terminus.

Vernon, Texas.—The work of constructing the Blackwell, Enid & Southwestern Railroad between Vernon and Enid has commenced in Vernon, and the line will be completed to the Red river as soon as possible. Edward F. Peckham at Blackwell, Okla., is president of the company. The total length of the line will be 200 miles.

Westminster, Md.—It is reported that a company may be formed to build an electric railroad to Gettysburg, Pa., and that it has secured an option on the turnpike between Reisterstown, Westminster and the Pennsylvania line. Charles E. Fink of Westminster is reported as interested in the plan.

Wheeling, W. Va.—Representatives of the Pittsburg, Connellsville & Wheeling Railroad Co. have been conferring with business men of Wheeling with the view of inducing Ohio county, in which Wheeling is located, to take \$500,000 in bonds in the interest of the railroad. Among those interested are James Patton and N. W. Evans of Waynesburg, Pa.

Whitcomb, W. Va.—The Greenbrier division of the Chesapeake & Ohio Railway has been completed to Cass, W. Va., a distance of eighty-two miles, and is now under construction from Cass to Durbin, a distance of fourteen miles. As already stated in the Manufacturers' Record, it will connect the Coal & Iron division of the West Virginia Central & Pittsburgh system, now under construction, with the Chesapeake & Ohio.

Whitesburg, Ky.—It is reported that surveys are being made in the interest of the Virginia Coal & Iron Co. for a railroad which will terminate at Whitesburg.

Woodbury, Tenn.—James A. Jones is reported as being interested in the plan to build a railroad from Woodbury to a point on the Nashville & Knoxville Railroad.

### Street Railways.

Alexandria, La.—F. M. Welch, mayor of Alexandria, is promoting an electric railroad in the city and suburbs which may be extended to Pineville, and, it is stated, may form a company in the near future to construct it.

Algiers, La.—A route is being selected for the proposed electric railroad in Algiers. August Schabel of New Orleans is one of the promoters.

Clarksburg, W. Va.—The Westfork Construction Co. has been organized to build a street railway in Clarksburg and suburbs, also to carry out a number of improvements. J. W. Williams of Clarksburg is interested in the company.

Greensboro, N. C.—The promoters of the proposed railroad in Greensboro and suburbs have secured a charter under the title of the Greensboro Electric Co. The promoters include John Karr, M. B. Barr and Z. V. Taylor. Mr. Taylor is the local representative.

Mobile, Ala.—James H. and Edward S. Caldwell, it is reported, have become interested in a proposed electric railroad in the city and suburbs, and will apply for a franchise to build it.

Nashville, Tenn.—The People's Street Railway Co. has asked for a franchise to build an electric line on certain streets of the city and suburbs.

Richmond, Va.—Fritz Sitterding has purchased the Chestnut Hill Electric Railroad, and, it is reported, will relay the line with heavier rails and make other improvements. It is about four miles in length.

Texarkana, Texas.—The city council has granted a franchise to R. M. Shaw and others of Kansas City to construct an electric railway in the town and suburbs.



**Machinery, Proposals and Supplies Wanted.**

**Manufacturers and others in need of machinery of any kind are requested to consult our advertising columns, and if they cannot find just what they wish, if they will send us particulars as to the kind of machinery needed we will make their wants known free of cost, and in this way secure the attention of machinery manufacturers throughout the country. The MANUFACTURERS' RECORD has received during the week the following particulars as to machinery that is wanted.**

**Aluminum Workers.**—C. W. Corriher, China Grove, N. C., wants to correspond with aluminum workers relative to contracting for manufacture of a few aluminum tubes; particulars on application.

**Bed-spring Machinery.**—Rowan Mattress Works, Salisbury, N. C., wants machinery and supplies for making bed springs.

**Boiler and Engine.**—See "Tobacco-manufacturing Equipment."

**Boiler and Engine.**—Webb & Welsiger, Wellville, Va., are in the market for 25-horse-power engine and 30-horse-power boiler, detached, second-hand.

**Boilers.**—See "Planing Mill."

**Boilers.**—Weber Wagon Co., Eighty-first and Wallace streets, Chicago, Ill., wants water-tube boilers, 250 horse-power, modern, first-class condition.

**Boilers and Engines.**—See "Electric-power Plant."

**Bottlers' Supplies.**—Great Southern Remedy Co., Fort Smith, Ark., will need bottles, labels, corks and advertising matter.

**Bridges.**—It is reported bids will be opened June 24 for construction of three steel bridges in Lewis county; Geo. H. Roberts, county commissioner, Monticello, Mo.

**Bridges.**—Bids will be opened June 24 for construction of steel highway bridge (at Iron City), two spans eighty feet each, span 160 feet and 120 feet steel approaches, 16-foot roadway; also for bridge, one span, 160 feet, eighty feet steel approach (at Wayland Springs). Plans and specifications are on file. For information address F. M. Cannon, chairman of committee, Lawrenceburg, Tenn.

**Bridging.**—Sealed proposals will be received at office of county commissioners, Wm. Kea, chairman, Dublin, Ga., until July 20 for erection of 1100 feet of steel bridging according to plans and specifications on file.

**Broom Machinery.**—Young & Engram, Eufaula, Ala., want information regarding broom machinery, etc.

**Chair Machinery and Supplies.**—J. M. D. Bruce, Pickens, S. C., wants addresses of manufacturers of chair machinery and split bottoms.

**Corn Mill.**—See "Flour Mill."

**Corn Mill.**—S. R. Jaques & Tinsley Co., Macon, Ga., wants to correspond relative to installation of corn-grinding mill to be operated by steam or water power.

**Drain Tiling.**—Lakeland, Fla., wants to buy a carload of drain tiling for street culverts. Address H. J. Drane, president of council.

**Drilling Outfit.**—Newport Oil Prospecting Co., Newport, Ark., will probably want outfit for drilling in 2000 feet.

**Dry-kiln.**—Kennedy's & Morelock Stave Co., Wm. M. Kennedy, president, Wynne, Ark., is in the market for two-room dry-kiln apparatus for drying staves and heading.

**Electrical Machinery.**—Mrs. E. C. L. Picklen, Rappabannock Electric Light & Power Co., Fredericksburg, Va., contemplates buying 60 or 75-kilowatt three-phase dynamo.

**Electric-light and Power Plant.**—John L. Stanley, city clerk, Butler, Mo., will open bids June 27 for electric-light and power plant, or portions thereof, in accordance with plans and specifications, which may be seen at city clerk's office and at office of Owen Ford, engineer, 710 Security Building, St. Louis. Certified check for 3 per cent. of amount of bid required. Usual rights reserved.

**Electric-light Plant.**—Arthur E. Justice, Waverly Water Supply Co., Waverly, Tenn., will need one or two boilers, dynamo, engines, electric fittings, etc.

**Electric-power Plant.**—Egleston Company, Ltd., P. O. Box 69, Donaldsonville, La., wants plant for electric-power generating station, including two high-pressure return-tubular boilers, 125 pounds pressure, 66

inches diameter by 18 feet long, with fifty-four four-inch tubes in each; one 60-inch by 18-foot standard return-tubular boiler for 100 pounds pressure; each to be fitted complete with half-arch fronts, castings, fittings, stacks, etc., without domes; one 16x36-inch Corliss engine, simple, non-condensing, wheel to weigh 9500 pounds; one slide-valve engine 10x16 inches; also figures on 200-horse-power water-tube boiler instead of return-tubular boilers. Address with specifications.

**Elevating and Conveying Machinery.**—B. H. Hardaway, Columbus, Ga., wants to buy a new or second-hand locomotive crane of from three to five tons capacity and forty to fifty feet radius.

**Elevator.**—See "Tobacco-manufacturing Equipment."

**Engine.**—Carson Lime Co., Riverton, Va., is in the market for a 30-horse-power portable engine, second-hand.

**Engines and Dynamos.**—E. A. Hitchcock, Secretary Department of Interior, Washington, D. C., will open bids July 1 for installation of engines and dynamos of Interior Department (old Postoffice Department) building, in accordance with drawings and specifications, copies of which may be had from chief clerk of department.

**Flouring Machinery.**—J. H. McBrayer, Shelby, N. C., wants to purchase a sifter or cleaner for wheat.

**Flour Mill.**—W. S. Stroud, Witcherville, Ark., wants prices on complete outfit for 100-barrel flour mill, including scales, packers, etc.

**Flour Mill.**—Reesor & Duncan, Lebanon Junction, Ky., are in the market for three stands of double rolls, scalper, grader, purifier and reels.

**Flour Mill.**—D. D. De Butts, Greensboro, N. C., wants information on corn and flour milling, with prices on equipment for 40-barrel flour and 100-bushel corn mill.

**Flour Mill.**—Marion Jeffries, Culpeper, Va., wants to buy a 100-barrel flour mill and 400-bushel corn mill.

**Flour-mill Machinery.**—Rand Bros., Morven, Va., will want full outfit system for flour mill.

**Flour-mill Machinery.**—O. O. Murray & Co., Catawba, N. C., wants flour-mill machinery, including power plant.

**Gas Machine.**—L. S. Scott, Crowley, La., wants addresses of manufacturers of machines for generating gas for use in heating metal for a linotype machine.

**Glass Grinders.**—Ready Doctor Medicine Co., Box 136, Eufaula, Ala., wants addresses of glass grinders.

**Ice Plant.**—B. S. Wright, Brooksville, Fla., wants prices on 10-ton ice machine.

**Knitting-mill Machinery.**—Lewis Jones Knitting Co., Winchester, Va., will buy sewing and finishing machines for ribbed underwear.

**Lead Cable.**—Sealed proposals addressed to "Board of Awards," Baltimore, Md., will be opened June 26 for furnishing, drawing in and joining 14,500 feet of lead cable; also furnishing 6000 feet of lead cable f. o. b. Baltimore. Specifications furnished on application to P. W. Wilkinson, secretary Fire Department. Certified check for 10 per cent. of contract price must accompany each proposal. Usual rights reserved.

**Machine Tools.**—Union Iron Works Co., Selma, Ala., is in the market for 10-inch or 12-inch second-hand slotter, new No. 2 milling machine, 18-inch shaper, radial or plain drill press to drill holes up to two inches.

**Painting Machine.**—Decatour Cornice & Roofing Co., New Decatur, Ala., is in the market for a painting machine suitable for painting roofing in rolls 102, 14 and 20 and 28 inches wide by 100 feet long.

**Pile-driver.**—J. R. Culp, Chester, S. C., wants to purchase second-hand pile-driver.

**Planing Mill.**—Spruks Manufacturing Co., Washington, N. C., is in the market for a planing-mill outfit, two 100-horse-power boilers and about 6000 square feet of roofing.

**Power Plant.**—See "Flour-mill Machinery."

**Pump.**—Schulenburg Oil Mill, Schulenburg, Texas, is in the market for a fire pump, new or second-hand; must be large enough for keeping good pressure on four-inch water mains.

**Railway Equipment.**—James & Co., Chattanooga, Tenn., are in the market for two second-hand Corliss engines, 100 to 150 horse-power; also second-hand 100-horse-power slide-valve engine and 36-inch gauge 20-ton locomotive.

**Railway Equipment.**—Grant & Williams, Park Row Building, New York, are constantly in the market for railway equipment, second-hand; they are dealers.

**Railway Equipment.**—Southern Supply

Co., Mobile, Ala., is in the market for a 30-ton locomotive, three-foot gauge, mogul type, with tender, cylinders about 14x22, second-hand preferred.

**Roofing.**—See "Planing Mill."

**Saw-mill Supplies.**—Geo. W. Willebrands & Bro., 50 Jefferson avenue, Detroit, Mich., want automatic saw sharpener, nine-inch molder and one varnishing vat.

**Saw-milling Equipment.**—A. J. Burleson, Starks, La., is in the market for second-hand carriage and set works with trucks and track irons complete for small mill of 30,000 feet capacity; also for second-hand combination matcher and planer.

**Tobacco Machinery.**—Henderson Extract Works, Henderson, Ky., wants addresses of manufacturers of centrifugals.

**Telephone Equipment.**—Southern Telephone Co., Lake Creek, Texas, will need poles and construction material of all kinds.

**Tobacco-manufacturing Equipment.**—W. C. Scott, Drakes Branch, Va., will want 40-horse-power boiler and 25-horse-power engine suitable for running an automatic dryer for leaf tobacco, power screw and an elevator, combination for hand or steam, 2000 pounds lifting capacity.

**Water-works.**—Arthur E. Justice, Waverly Water Supply Co., Waverly, Tenn., will need water pipe, fittings, etc.

**Water-works.**—Proposals will be entertained from engineers on engineering work necessary for installation of water-works system at Hattiesburg, Miss., (reported during the week) until July 2. For specifications and instructions address A. Fairley, city clerk.

**Well-drilling.**—R. A. Munson, manager Texarkana Development Co., Texarkana, Ark., is corresponding with parties relative to sinking wells.

**Well-drilling Equipment.**—Golden Rod Oil Co., T. W. Hughes, secretary, Port Arthur, Texas, will want to purchase well-drilling outfit.

**Well-drilling Equipment.**—Interstate Oil & Gas Co. will be in the market for drills, rigging, etc., exclusive of engine and boilers. Address Karl F. Bierach & Bro. Company, 204 Equitable Building, Louisville, Ky.

**Woodworking Machinery.**—W. M. Absher Co., North Wilkesboro, N. C., wants to buy a cross-arm boring machine.

**Woodworking Machinery.**—Gatling & Smith, Hallsboro, N. C., want to buy second-hand medium-size gang edger.

**Woodworking Machinery.**—Charlotte Caskey Co., Charlotte, N. C., is in the market for a couple of coffin-side benders and a second-hand bent sander.

**Woodworking Machinery.**—A. H. Graf, Gold Hill, N. C., wants to buy second-hand planer and matcher to work flooring and ceiling, also for dressing planks.

**Woodworking Machinery.**—See "Saw-mill Equipment."

**Woodworking Machinery.**—J. L. Horn, Mayland, Tenn., wants to correspond with manufacturers of spoke machinery.

**Woodworking Machinery.**—Greensboro Table & Mantel Co., J. A. Hodgins, president, Greensboro, N. C., will want machinery for manufacture of tables and mantels.

**TRADE NOTES.**

**Saw-Mill for Sale.**—An opportunity to engage in the lumber-manufacturing business is offered by J. S. Crosby of Greenville, Mich. The plant offered for sale includes circular-saw mill and shingle mill, all completely equipped and in operating condition. Log tools and outfit are also connected with the plant.

**Arrived at Bremen.**—Chas. C. Newton, president of Newton Machine Tool Works, has arrived at Bremen on his annual trip abroad to attend to the numerous foreign interests of his company. Mr. Newton will make an extended tour through Russia and Hungary, and will also attend to his interests in Great Britain.

**Neptune Anti-Fouling Compound for Ships' Boilers.**—This product is meeting with the highest degree of success in the steamship world. Its merits as an anti-fouling material for ships' boilers have attracted the attention of and afforded the utmost satisfaction to the prominent steamship companies. The North German Lloyd Steamship Co. of New York says that since July last they have used the compound on seventeen steamers with satisfactory results, and intend to introduce it on all of their steamers. In pursuance of this purpose the company has just ordered five tons of the Neptune Anti-Fouling Compound for Boilers. The Engel & Fagerstein Chemical

Co. of 1702 Wabash avenue, Chicago, Ill., manufactures the compound referred to.

**Contract for Gravity Dam.**—The manifold merits of the gravity dam, its low cost of maintenance and other advantages constantly recommend it to power developers. The Beardsley Gravity Dam is the dam in question, and it has been constructed for many years with the utmost success to owners. The Beardsley Gravity Dam & Construction Co., Elkhart, Ind., contracts for the construction of the dam mentioned. It has just filed an order to build a gravity dam at Stanton, Neb., for the Stanton Water-Power Co., and one at Caro, Mich., for the Carol Light & Power Co.

**Contractors' Plants and Railway Equipment.**—These two branches of equipment constitute a class that is largely in demand at all times, more especially during such industrial activity as is prevailing at present. Steam shovels, rails, hoisting engines, cars, locomotives, etc., comprise the lines handled by Messrs. Grant & Williams, Park Row Building, New York city. This firm is fully equipped with all necessary facilities for putting second-hand equipments in good operating condition, cuts rails to any length, and otherwise offers its modern facilities to the purchasing public.

**Indispensable in Towing Operations.**—When Shamrock II was injured on her trial trips last month it was proposed to tow her back to the Clyde for repairs. The underwriters declined to allow the suggestion being carried out unless the ship was jury-rigged or provision made to prevent her going astray in case the towline should part. If a Shaw & Spiegle Steam Towing Machine had been at hand there would have been no risk attached to towing the vessel. The device mentioned has been used on the Great Lakes and the ocean for fourteen years and its important purpose has always been entirely fulfilled. The machine overcomes all severe strains and sudden pulls by an automatic action. It is made by the American Ship Windlass Co., Providence, R. I. Send for particulars.

**Prize for Photographing Jackson Drill.**—It is announced by H. D. Crippen, 52 Broadway, New York city, that the \$50 prize for the best flashlight photograph of his Jackson Hand Power Rock Drill in actual operation has been awarded to Mrs. Emily Rice of Cheyenne, Wyoming. The picture shows the drill operated by J. D. Kazar at Hecla, Wyoming. Mr. Kazar writes Mr. Crippen: "I have been using one of your drills continually since December 24, 1900, running same 150 feet under ground in one of the hardest of granites, in which men (double-handed) do well to make five or six inches per hour. One man with the Jackson drill is now doing from eighteen to twenty inches per hour. The drill runs like clock-work, and is easy to handle. Many here are interested in the drill." Mr. Crippen is sole licensee and manufacturer of the drill.

**TRADE LITERATURE.**

**Bullock Direct-Current Machinery.**—A handsomely printed and illustrated booklet has been issued by the Bullock Electric Manufacturing Co. of Cincinnati. The publication is presented to those who visit the Pan-American Exposition as a souvenir of the Bullock Company's line of direct-current electrical machinery.

**Painting by Machinery.**—Painting by machinery is no longer a novelty. Manufacturers have devised and introduced painting machines that afford entire satisfaction to users. These machines apply either paint, whitewash or other coating, and with two men handling them will each do the work requiring twenty-five hands with brushes. Send to the Star Brass Works, 67 Canal street, Chicago, for leaflet of its Star White-wash and Painting Machine.

**Cleaning the Boiler.**—The formation of scale and impurities that exist in water used in steam boilers is a constant source of bother and expense to steam-power-plant operators. To keep the boiler clean it is necessary to use special devices, and the Ford Automatic Boiler Cleaner Co. offers its invention, which has been installed successfully in many large and important plants. The device removes all impurities from boiler water, prevents the formation of scale and deposit of sediment, loosens old scale so that it can be removed, and by these accomplishments accordingly decreases the fuel bill, saves cost of repairs, saves time and expense of cleaning, doubles the life of the boiler and lessens greatly the danger of explosion. The Ford device can be applied in one day. Write the company at 804 Carleton Building, St. Louis, for booklet of full particulars.



## FINANCIAL NEWS.

The Manufacturers' Record invites information about Southern financial matters, items of news about new institutions, dividends declared, securities to be issued, openings for new banks, and general discussions of financial subjects bearing upon Southern matters.

## Southern Bank Clearings.

The report of bank clearings made by the Financial Chronicle for the week ending June 8 shows an increase over the corresponding week of 1900 of 29.7 per cent. in the Southern cities, the largest of all of the groups except the Middle States.

## New Corporations.

The Prudential Investment Co. has been formed at Valdosta, Ga., by W. D. Peoples and others, with \$10,000 capital stock.

M. Jones has been elected president, and H. H. Matthews, vice-president, of the Laclede Farmers' Mutual Insurance Co. of Laclede, Mo.

J. C. Hutcheson is interested in the Home Building & Investment Co., recently organized at Houston, Texas, with \$50,000 capital stock.

The Metropolitan Loan & Banking Co. has been organized at Fort Worth, Texas, with \$100,000 capital stock, by C. C. Wilson and others.

The Statesville Loan & Trust Co. of Statesville, N. C., has decided to open a savings department in connection with its general banking business.

The Williams-Reardon Real Estate & Brokerage Co. has been organized at St. Louis, with \$10,000 capital stock, by Edward J. Williams and others.

B. F. Arthur of Union, S. C., is interested in the bank being organized in that town with \$60,000 capital stock. It will be known as the People's Bank.

F. C. Abbey of Charlotte, N. C., has been elected president of the Southern States Trust Co., recently organized in that city with \$100,000 capital stock.

An insurance company has been organized at Newport News, Va., by the colored society known as Galilean Fishermen. Thomas H. Shorts is president.

Arrangements have been made to open a new bank at Oxford, N. C., with Robert Lassiter, president; Charles D. Ray, vice-president, and W. D. Hunt, cashier.

E. C. Scott has been elected president, and J. A. Kelley, vice-president, of the Bank of Kingstree, recently organized at Kingstree, S. C., with \$15,000 capital stock.

The bank recently organized at Sykesville, Md., will begin business about July 1 with W. H. D. Warfield, president; George H. Bevard, vice-president, and William L. Chipley, cashier.

The stockholders of the bank recently organized at Spartanburg, S. C., have elected J. T. Harris, president; J. T. Calvert, vice-president, and T. J. Boyd, cashier. The bank is capitalized at \$100,000.

The Commonwealth Savings & Insurance Co. has been organized at Richmond, Va., with \$200,000 capital stock. F. C. Christian is president; J. R. Wilson, vice-president, and W. K. Smith, secretary. It is stated that J. R. Smith & Co. of Chicago and Rothschild & Co. of Philadelphia, banking firms in these cities, are interested in the company.

## New Securities.

The State authorities have approved an issue of \$45,000 in bonds of the school district of Victoria, Texas.

The city of Anniston, Ala., has decided to issue \$360,000 in refunding bonds. The mayor may be addressed.

John L. Stanley, city clerk, will receive bids until June 27 for the issue of \$19,000 in 4 per cent. bonds of Butler, Mo.

The town of Granbury, Texas, has voted in favor of issuing \$5000 in 4 per cent. improvement bonds. Address the mayor.

Bids will be received until June 27 for the issue of \$19,000 in bonds of New Martinsville, W. Va. E. S. Duerr may be addressed.

The city of Hattiesburg, Miss., has voted in favor of the proposed issue of \$30,000 in improvement bonds. Address the mayor.

The town of Sparks, Ga., has voted in favor of issuing \$5000 in 6 per cent. bonds, which have been purchased by Atlanta investors.

O. D. Thomas, town clerk, will receive proposals until July 2 for the issue of \$15,000 in 6 per cent. improvement bonds of Rosedale, Miss.

The Third National Bank of Atlanta has purchased \$120,000 worth of the issue of city bonds recently placed on the market, paying 103.60.

J. T. Pannill, secretary of the school board, will receive bids until July 3 for the issue of \$15,000 in bonds of the school district of Reidsville, N. C.

The city treasurer may be addressed relative to the issue of \$15,000 in improvement bonds to be sold on June 25 by the town of Covington, Ga.

Bids will be received until July 10 by E. J. Dillard, chairman of the finance committee, for \$100,000 in 3½ per cent. bonds of the city of Chattanooga, Tenn.

The school district of Thornton, Texas, will vote June 29 on the question of issuing \$5000 in bonds. The school board may be addressed at the town of this name.

The issue of \$6000 in 5 per cent. refunding bonds of Marion, Va., remains unsold, and will probably be again offered to investors. The town clerk may be addressed.

F. Y. Anderson may be addressed relative to the issue of \$20,000 in 4 per cent. bonds of Jefferson county, Alabama, for which proposals will be received until June 24 at Birmingham.

The board of supervisors of Monroe county, Mississippi, have decided to place on the market \$15,000 in 5 per cent. bonds for improvements. The board may be addressed at Aberdeen, Miss.

J. M. Willis of Hampton, Va., may be addressed relative to the issue of \$25,000 in 4 per cent. bonds offered for sale by Elizabeth City county, Virginia. Bids will be received until July 1.

The Irondale Water, Light & Power Co. of Birmingham, Ala., has decided to increase its capital stock to the extent of \$200,000 and to issue bonds to the same amount to be used in making improvements.

The issue of \$100,000 in 4 per cent. bonds of Roane county, Tennessee, remains unsold. Proposals will be again received for the issue until July 1. J. F. Cormany at Kingston, Tenn., may be addressed.

The city council of Montgomery, Ala., has decided to place the issue of \$75,000 in 4½ per cent. bonds authorized by the legislature on the market in the near future, and has instructed the city treasurer to advertise for bids.

M. S. Swain of Austin, Texas, has recently purchased the following issues of securities: \$16,000 in 5 per cent. bonds of Borden county, Texas; \$3500 worth of 5 per cent. bonds of Dickens county, Texas; \$18,000 in 4 per cent. bonds of Randall county, Texas, and \$33,000 in 4 per cent. bonds of Stonewall county, Texas.

The stockholders of the Tennessee Coal, Iron & Railroad Co. have ap-

proved the decision to issue \$15,000,000 in bonds, which will replace the present issue and allow \$5,000,000 to refund floating indebtedness and to make improvements. It is reported that about \$3,000,000 will be used in enlarging the works of the company and in developing its mining property.

## Financial Notes.

Bankers of Washington have formed an association for mutual benefit, which will be termed the Washington Bankers' Association. Among those interested are Charles J. Bell and Thomas Hyde. The association includes all of the banks of discount of the city.

## SOUTHERN COTTON-MILL STOCKS.

Quotations furnished by Hugh MacRae & Co., Wilmington, N. C., for Week Ending June 18.

	Bid.	Asked.
Abbeville Cotton Mills (S. C.)	93	93½
Alken Mfg. Co. (S. C.)	92	95½
American Spinning Co. (S. C.)	102	102
Anderson Cotton Mills (S. C.)	129	129
Arcade Cotton Mills (S. C.)	100	100
Arkwright Mills (S. C.)	120	120
Augusta Factory (Ga.)	81½	81½
Avondale Mills (Ala.)	80	80
Belton Mills (S. C.)	103½	103½
Bennettsville Mfg. Co. (S. C.)	100	100
Cabarrus Cotton Mills (N. C.)	148	155
Clinton Mfg. Co. (S. C.)	175	185
Clinton Cotton Mills (S. C.)	129	129
Courtenay Mfg. Co. (S. C.)	116	119
Dallas Mfg. Co. (Ala.)	90	102
Darlington Mfg. Co. (S. C.)	97	100
Eagle & Phenix Mills (Ga.)	100	100
Enoree Mfg. Co. (S. C.)	114	116½
Enterprise Mfg. Co. (Ga.)	100	103
F. W. Poe Mfg. Co. (S. C.)	114	118½
Gaffney Mfg. Co. (S. C.)	102½	103½
Granby Cotton Mills (S. C.)	102½	103½
Granby Cotton Mills (S. C.) 1st Pfd.	103	107½
Graniteville Mfg. Co. (S. C.)	160	167
Greenwood Cotton Mills (S. C.)	98	103½
Grendel Mills (S. C.)	100	105
Henderson Cotton Mills (N. C.)	120	125
Henrietta Mills (N. C.)	200	207
John P. King Mfg. Co. (Ga.)	102	102
Langley Mfg. Co. (S. C.)	112½	113½
Laurens Cotton Mills (S. C.)	142	150
Lockhart Mills (S. C.)	101	106
Loray Mills (N. C.)	92	92
Louise Mills (N. C.)	100	104
Lynchburg Cotton Mills (Va.)	125	130
Lynchburg Cotton Mills (Va.) Pfd.	145	150
Manchester Cotton Mills (S. C.)	110	116½
Mayo Mills (S. C.)	150	150
McColl Mfg. Co. (S. C.)	101	101
Newberry Cotton Mills (S. C.)	115	122
Odell Mfg. Co. (N. C.)	104	108½
Orr Cotton Mills (S. C.)	100	103½
Pacolet Mfg. Co. (S. C.)	200	200
Pelzer Mfg. Co. (S. C.)	173	183
Piedmont Mfg. Co. (S. C.)	185	185
Raleigh Cotton Mills (N. C.)	135	135
Richland Cotton Mills (S. C.)	110	110
Richland Cotton Mills (S. C.) Pfd.	101	105
Roanoke Mills (N. C.)	101	101
Sibley Mfg. Co. (Ga.)	81	81
Spartan Mills (S. C.)	97	100½
Trion Mfg. Co. (Ga.)	130	135
Tucupau Mills Co. (S. C.)	130	130
Union Cotton Mills (S. C.)	135	150
Union Cotton Mills (S. C.) Pfd.	100	103
Victor Mfg. Co. (S. C.)	102	107
Warren Mfg. Co. (S. C.)	90	90
Warren Mfg. Co. (S. C.) Pfd.	105	105
Whitney Mfg. Co. (S. C.)	120	120
Wilmington Cot. Mills (N. C.) Pfd.	100	105
Wiscasset Mills (N. C.)	115	115

## TRADE LITERATURE.

Motors and Ceiling Fans.—The season is here that calls for the use of fans for ventilation and for cooling the atmosphere in offices, stores and other places. The Western Electrical Supply Co. of St. Louis, Mo., has issued literature referring to its offerings of fan motors and ceiling fans for direct and alternating current. Send for descriptive publications.

Dynamo Belts.—The development of electricity and its introduction into so many uses brought also into being the necessity for perfecting the accessories required for the operation of motors and dynamos. Among such accessories is the belt, upon the efficiency of which largely depends the speed and steadiness in running of electrical machinery. Messrs. I. B. Williams & Sons of Dover, N. H., manufacture belts especially adapted for dynamo use. Their leaflet, "Dynamo Belts," is interesting to users.

For Health and Recreation.—Recreation and health-seeking are great factors in the life of the American people. The annual exodus of millions of men, women and children to the seaside resorts is the visible proof of the statement. In numerous sections of this country do these resorts exist and attract the multitudes. City dwellers are naturally the most numerous in the throngs of humanity seen at the seashore. They go to refresh their tired bodies and enjoy the delights of the sea bath, the sea breezes and the relief from city heat, dust and noise. Of all these resorts, none sur-

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passes in natural beauty and attractions the well-known Ocean City, Md. This is a resort of the best possible excellence. It has steadily grown in popularity, mainly because of its own natural attractions. The indications are for a largely-increased number of visitors during the season of 1901. Nearness to the Gulf stream makes Ocean City's air wonderfully pure and dry. This also tempers the water and makes the bathing delightful and invigorating. The Eastern shores of Maryland and Virginia and the western shore of Virginia are sections of country in which the picturesque is enhanced on all sides by the variety that nature bestows on its virgin rivers, forests and hills. Their advantages appeal to the home-seeker as well as the pleasure-seeker, and thousands each year find there the most pleasurable conditions for an open-air life and its resultant rejuvenation of vigor. The Baltimore, Chesapeake & Atlantic Railway Co. offers transportation through this charming land both by rail and boat, and its patrons find the accommodations all that the most exacting could demand in this day of modern conveniences. The company's booklet of description and illustration of the country contiguous to its lines is now ready for applicants. Address T. Murdoch, passenger agent, 241 South street, Baltimore.